

GenCore version 5.1.7
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CM protein - protein search, using sw model

Run on: April 13, 2006, 17:19:00 ; Search time 35.4017 Seconds
(without alignments)
282.578 Million cell updates/sec

Title: US-10-727-737-17

Perfect score: 649

Sequence: 1 EVQLVESGGGLVQPGSLRL.....FYGTTYFDYWGQGLVTWSS 121

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

- 1: /cgn2_6/ptodata/1/iaa/5 COMB.pep.*
- 2: /cgn2_6/ptodata/1/iaa/6 COMB.pep.*
- 3: /cgn2_6/ptodata/1/iaa/H COMB.pep.*
- 4: /cgn2_6/ptodata/1/iaa/PCTUS COMB.pep.*
- 5: /cgn2_6/ptodata/1/iaa/RE COMB.pep.*
- 6: /cgn2_6/ptodata/1/iaa/backfiles1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Match	Length	ID	Description
1	649	100.0	121	2	US-08-974-899-24
2	649	100.0	121	2	US-09-795-798-24
3	632	97.4	121	2	US-08-974-899-5
4	632	97.4	121	2	US-09-795-798-5
5	548.5	84.5	116	2	US-09-027-449-50
6	548.5	84.5	116	2	US-08-804-444A-50
7	548.5	84.5	116	2	US-09-026-985-50
8	548.5	84.5	116	2	US-09-121-952A-50
9	548.5	84.5	116	2	US-09-234-340A-50
10	548.5	84.5	116	2	US-09-355-014-50
11	520.5	80.2	122	1	US-07-334-373C-20
12	520.5	80.2	122	2	US-08-437-642B-20
13	520.5	80.2	122	2	US-08-146-206C-20
14	520.5	80.2	122	2	US-09-705-686-20
15	520.5	80.2	122	2	US-09-705-392A-20
16	520.5	80.2	122	2	US-09-705-398-20
17	520.5	80.2	122	4	PCT-US93-07832-20
18	512.5	79.0	253	2	US-09-027-449-52
19	512.5	79.0	253	2	US-09-027-449-55
20	512.5	79.0	253	2	US-08-804-444A-52
21	512.5	79.0	253	2	US-08-804-444A-55
22	512.5	79.0	253	2	US-09-026-985-52
23	512.5	79.0	253	2	US-09-026-985-55
24	512.5	79.0	253	2	US-09-121-952A-52
25	512.5	79.0	253	2	US-09-121-952A-55
26	512.5	79.0	253	2	US-09-234-340A-52
27	512.5	79.0	253	2	US-09-234-340A-55

28	512.5	79.0	253	2	US-09-355-014-52	Sequence 52, Appl
29	512.5	79.0	253	2	US-09-355-014-55	Sequence 55, Appl
30	512.5	79.0	256	2	US-09-027-449-70	Sequence 70, Appl
31	512.5	79.0	256	2	US-09-026-985-70	Sequence 70, Appl
32	512.5	79.0	256	2	US-09-121-952A-70	Sequence 70, Appl
33	512.5	79.0	256	2	US-09-234-340A-70	Sequence 70, Appl
34	512.5	79.0	256	2	US-09-355-014-70	Sequence 70, Appl
35	512.5	79.0	298	2	US-09-027-449-60	Sequence 60, Appl
36	512.5	79.0	298	2	US-08-804-444A-60	Sequence 60, Appl
37	512.5	79.0	298	2	US-09-026-985-60	Sequence 60, Appl
38	512.5	79.0	298	2	US-09-121-952A-60	Sequence 60, Appl
39	512.5	79.0	298	2	US-09-234-340A-60	Sequence 60, Appl
40	512.5	79.0	298	2	US-09-355-014-60	Sequence 60, Appl
41	512.5	79.0	452	2	US-09-027-449-71	Sequence 71, Appl
42	512.5	79.0	452	2	US-09-026-985-71	Sequence 71, Appl
43	512.5	79.0	452	2	US-09-121-952A-71	Sequence 71, Appl
44	512.5	79.0	452	2	US-09-234-340A-71	Sequence 71, Appl
45	512.5	79.0	452	2	US-09-355-014-71	Sequence 71, Appl

ALIGNMENTS

RESULT 1
US-08-974-899-24
; Sequence 24, Application US/08974899
; Patent No. 6037454
; GENERAL INFORMATION:
; APPLICANT: Presta, Leonard G.
; APPLICANT: Jardieu, Paula M.
; TITLE OF INVENTION: Humanized Anti-CD11a Antibodies
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Winpatin (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/974,899
; FILING DATE:
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/031971
; FILING DATE: 11/27/96
; ATTORNEY/AGENT INFORMATION:
; NAME: Lee, Wendy M.
; REGISTRATION NUMBER: 40,378
; REFERENCE/DOCKET NUMBER: P1014R1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-1994
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 121 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear
US-08-974-899-24

Query Match 100.0%; Score 649; DB 2; Length 121;
Best Local Similarity 100.0%; Pred. No. 7,7e-57;
Matches 121; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 EVQLVESGGGLVQPGSLRLSCAASGYSFTGHWNWVROAPGKGLIEWGTAPASSSTRY 60
Db 1 EVQLVESGGGLVQPGSLRLSCAASGYSFTGHWNWVROAPGKGLIEWGTAPASSSTRY 60

Qy 61 NQKFKDRFTTISVDKSKNTLYLQMNLSRAEDTAVVYCARGIYFYGTTFDYWGQGLTVTS 120
 Db 61 NQKFKDRFTTISVDKSKNTLYLQMNLSRAEDTAVVYCARGIYFYGTTFDYWGQGLTVTS 120
 Qy 121 \$ 121
 Db 121 \$ 121

RESULT 2

US-09-795-798-24
 ; Sequence 24, Application US/09795798
 ; Patent No. 6703018
 ; GENERAL INFORMATION:
 ; APPLICANT: Presta, Leonard G.
 ; TITLE OF INVENTION: Humanized Anti-CD11a Antibodies
 ; NUMBER OF SEQUENCES: 24
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Genentech, Inc.
 ; STREET: 1 DNA Way
 ; CITY: South San Francisco
 ; STATE: California
 ; COUNTRY: USA
 ; ZIP: 94080
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: WinPatIn (Genentech)
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/795,798
 ; FILING DATE: 28-Feb-2001
 ; CLASSIFICATION: <Unknown>
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: 08/974,899
 ; FILING DATE: <Unknown>
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Lee, Wendy M.
 ; REGISTRATION NUMBER: 40,378
 ; REFERENCE/DOCKET NUMBER: P1014R1
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 650/225-1994
 ; TELEFAX: 650/952-9881
 ; INFORMATION FOR SEQ ID NO: 24:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 121 amino acids
 ; TYPE: Amino Acid
 ; TOPOLOGY: Linear

US-09-795-798-24
 ; SEQUENCE DESCRIPTION: SEQ ID NO: 24:

Query Match 100.0%; Score 649; DB 2; Length 121;
 Best Local Similarity 100.0%; Pred. No. 7.7e-57;
 Matches 121; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 EVQLVSGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKLEWVGMIAPASSSTRY 60
 Db 1 EVQLVSGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKLEWVGMIAPASSSTRY 60
 Qy 61 NQKFKDRFTTISVDKSKNTLYLQMNLSRAEDTAVVYCARGIYFYGTTFDYWGQGLTVTS 120
 Db 61 NQKFKDRFTTISVDKSKNTLYLQMNLSRAEDTAVVYCARGIYFYGTTFDYWGQGLTVTS 120
 Qy 121 \$ 121
 Db 121 \$ 121

RESULT 3

US-08-974-899-5
 ; Sequence 5, Application US/08974899
 ; Patent No. 6037454

; GENERAL INFORMATION:
 ; APPLICANT: Presta, Leonard G.
 ; TITLE OF INVENTION: Humanized Anti-CD11a Antibodies
 ; NUMBER OF SEQUENCES: 24
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Genentech, Inc.
 ; STREET: 1 DNA Way
 ; CITY: South San Francisco
 ; STATE: California
 ; COUNTRY: USA
 ; ZIP: 94080
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: WinPatIn (Genentech)
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/974,899
 ; FILING DATE:
 ; CLASSIFICATION: 536
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: 60/031971
 ; FILING DATE: 11/27/96
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Lee, Wendy M.
 ; REGISTRATION NUMBER: 40,378
 ; REFERENCE/DOCKET NUMBER: P1014R1
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 650/225-1994
 ; TELEFAX: 650/952-9881
 ; INFORMATION FOR SEQ ID NO: 5:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 121 amino acids
 ; TYPE: Amino Acid
 ; TOPOLOGY: Linear
 ; US-08-974-899-5

Query Match 97.4%; Score 632; DB 2; Length 121;
 Best Local Similarity 96.7%; Pred. No. 3.7e-55;
 Matches 117; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
 Qy 1 EVQLVSGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKLEWVGMIAPASSSTRY 60
 Db 1 EVQLVSGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKLEWVGMIHPSDSETRY 60
 Qy 61 NQKFKDRFTTISVDKSKNTLYLQMNLSRAEDTAVVYCARGIYFYGTTFDYWGQGLTVTS 120
 Db 61 NQKFKDRFTTISVDKSKNTLYLQMNLSRAEDTAVVYCARGIYFYGTTFDYWGQGLTVTS 120
 Qy 121 \$ 121
 Db 121 \$ 121

RESULT 4

US-09-795-798-5
 ; Sequence 5, Application US/09795798
 ; Patent No. 6703018
 ; GENERAL INFORMATION:
 ; APPLICANT: Presta, Leonard G.
 ; TITLE OF INVENTION: Humanized Anti-CD11a Antibodies
 ; NUMBER OF SEQUENCES: 24
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Genentech, Inc.
 ; STREET: 1 DNA Way
 ; CITY: South San Francisco
 ; STATE: California
 ; COUNTRY: USA
 ; ZIP: 94080
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk

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; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WinPatin (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/795,798
; FILING DATE: 28-Feb-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/974,899
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Lee, Wendy M.
; REGISTRATION NUMBER: 40,378
; REFERENCE/DOCKET NUMBER: P1014R1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/952-9881
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 121 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 5:
US-09-795-798-5

Query Match          97.4%; Score 632; DB 2; Length 121;
Best Local Similarity 96.7%; Pred. No. 3.7e-55;
Matches 117; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

Cy 1 EVLVESGGGLVQPGGSLRLSCAASGYSFTGHMMNVRQAPGKGLWVGMIAPASSSTRY 60
Eb 1 EVLVESGGGLVQPGGSLRLSCAASGYSFTGHMMNVRQAPGKGLWVGMIHPSDSTRY 60
Cy 61 NQKFKDRFTISVDKSKNTLYLQNNLSRAEDTAVYYCARGIYFGTTFYDYGQGLTVTVS 120
Db 61 NQKFKDRFTISVDKSKNTLYLQNNLSRAEDTAVYYCARGIYFGTTFYDYGQGLTVTVS 120
Cy 121 S 121
Db 121 S 121

RESULT 5
US-09-027-449-50
; Sequence 50, Application US/09027449
; Patent No. 6025158
; GENERAL INFORMATION:
; APPLICANT: Gonzalez, Tania R.
; APPLICANT: Leong, Steven R.
; TITLE OF INVENTION: Antibody Fragment-Polymer Conjugates and
; TITLE OF INVENTION: Humanized Anti-IL-8 Monoclonal Antibodies
; NUMBER OF SEQUENCES: 72
; CORRESPONDENCE ADDRESS:
; ADDRESS: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WinPatin (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/027,449
; FILING DATE: 20-Feb-1998
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/074,330
; FILING DATE: 22-Jan-1998
; PRIOR APPLICATION DATA:
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; APPLICATION NUMBER: 60/038,664
; FILING DATE: 21-Feb-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Love, Richard B.
; REGISTRATION NUMBER: 34,659
; REFERENCE/DOCKET NUMBER: P1085R3-2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-5530
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 50:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 116 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear
; US-09-027-449-50

Query Match          84.5%; Score 548.5; DB 2; Length 116;
Best Local Similarity 88.8%; Pred. No. 6.2e-47;
Matches 103; Conservative 2; Mismatches 10; Indels 1; Gaps 1;

Cy 1 EVLVESGGGLVQPGGSLRLSCAASGYSFTGHMMNVRQAPGKGLWVGMIAPASSSTRY 60
Db 1 EVLVESGGGLVQPGGSLRLSCAASGYSFTGHMMNVRQAPGKGLWVGMIHPSDSTRY 60
Cy 61 NQKFKDRFTISVDKSKNTLYLQNNLSRAEDTAVYYCARGIYFGTTFYDYGQGLTVTVS 115
Db 61 ADVKGRFTISRDNKNTLYLQNNLSRAEDTAVYYCARGIYFGTTFYDYGQGLTVTVS 116

RESULT 6
US-08-804-444A-50
; Sequence 50, Application US/0880444A
; Patent No. 6117980
; GENERAL INFORMATION:
; APPLICANT: Gonzalez, Tania N
; APPLICANT: Leong, Steven R.
; APPLICANT: Presta, Leonard G.
; TITLE OF INVENTION: Humanized Anti-IL-8 Monoclonal Antibodies
; NUMBER OF SEQUENCES: 61
; CORRESPONDENCE ADDRESS:
; ADDRESS: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WinPatin (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/804,444A
; FILING DATE: 21-Feb-1997
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Love, Richard B.
; REGISTRATION NUMBER: 34,659
; REFERENCE/DOCKET NUMBER: P1085
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-5530
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 50:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 116 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear
; US-08-804-444A-50

Query Match          84.5%; Score 548.5; DB 2; Length 116;
Best Local Similarity 88.8%; Pred. No. 6.2e-47;
Matches 103; Conservative 2; Mismatches 10; Indels 1; Gaps 1;
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Qy 1 EVLVESGGGLVPGGSLRLSCAASGYSFTGHMNNWVRQAPGKGLWVGMIAPASSSTRY 60
Db 1 EVLVESGGGLVPGGSLRLSCAASGYSFTGHMNNWVRQAPGKGLWVGMIHPSDSETRY 60
Qy 61 NQKFKDFTISVDKSKNTLYLQNNSLRAEDTAVYIC-ARGIYFYGTTFDYWGQGT 115
Db 61 ADSVKGRFTISRDNKNTLYLQNNSLRAEDTAVYICARGIYFYGTTFDYWGQGT 116

RESULT 7
US-09-026-985-50
; Sequence 50, Application US/09026985
; Patent No. 6133426
; GENERAL INFORMATION:
; APPLICANT: Gonzalez, Tania R.
; APPLICANT: Leong, Steven R.
; APPLICANT: Presta, Leonard G.
; TITLE OF INVENTION: Antibody Fragment-Polymer Conjugates and
; TITLE OF INVENTION: Humanized Anti-IL-8 Monoclonal Antibodies
; NUMBER OF SEQUENCES: 72
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WinPatIn (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/026,985
; FILING DATE: 20-Feb-1998
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Love, Richard B.
; REGISTRATION NUMBER: 34,659
; REFERENCE/DOCKET NUMBER: P1085R3-1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-5530
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 50:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 116 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear
US-09-026-985-50

Query Match 84.5%; Score 548.5; DB 2; Length 116;
Best Local Similarity 88.8%; Pred. No. 6.2e-47;
Matches 103; Conservative 2; Mismatches 10; Indels 1; Gaps 1;

Qy 1 EVLVESGGGLVPGGSLRLSCAASGYSFTGHMNNWVRQAPGKGLWVGMIAPASSSTRY 60
Db 1 EVLVESGGGLVPGGSLRLSCAASGYSFTGHMNNWVRQAPGKGLWVGMIHPSDSETRY 60
Qy 61 NQKFKDFTISVDKSKNTLYLQNNSLRAEDTAVYIC-ARGIYFYGTTFDYWGQGT 115
Db 61 ADSVKGRFTISRDNKNTLYLQNNSLRAEDTAVYICARGIYFYGTTFDYWGQGT 116

RESULT 8
US-09-121-952A-50
; Sequence 50, Application US/09121952A
; Patent No. 6458355
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc., Hsei, Vanessa
; APPLICANT: Koumenis, Iphigenia
; APPLICANT: Leong, Steven R.
; APPLICANT: Presta, Leonard G.
; APPLICANT: Shahrokh, Zahra
```

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; APPLICANT: Zapata, Gerardo A.
; TITLE OF INVENTION: METHODS OF TREATING INFLAMMATORY DISEASES
; WITH ANTI-IL-8 ANTIBODY FRAGMENT-POLYMER CONJUGATES
; NUMBER OF SEQUENCES: 72
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WinPatIn (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/121,952A
; FILING DATE: 24-Jul-1998
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/074330
; FILING DATE: 22-JAN-1998
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/075467
; FILING DATE: 20-FEB-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Love, Richard B.
; REGISTRATION NUMBER: 34,659
; REFERENCE/DOCKET NUMBER: P1085R4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-5530
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 50:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 116 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear
US-09-121-952A-50

Query Match 84.5%; Score 548.5; DB 2; Length 116;
Best Local Similarity 88.8%; Pred. No. 6.2e-47;
Matches 103; Conservative 2; Mismatches 10; Indels 1; Gaps 1;

Qy 1 EVLVESGGGLVPGGSLRLSCAASGYSFTGHMNNWVRQAPGKGLWVGMIAPASSSTRY 60
Db 1 EVLVESGGGLVPGGSLRLSCAASGYSFTGHMNNWVRQAPGKGLWVGMIHPSDSETRY 60
Qy 61 NQKFKDFTISVDKSKNTLYLQNNSLRAEDTAVYIC-ARGIYFYGTTFDYWGQGT 115
Db 61 ADSVKGRFTISRDNKNTLYLQNNSLRAEDTAVYICARGIYFYGTTFDYWGQGT 116

RESULT 9
US-09-234-340A-50
; Sequence 50, Application US/09234340A
; Patent No. 6468532
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc., Hsei, Vanessa
; APPLICANT: Koumenis, Iphigenia
; APPLICANT: Leong, Steven R.
; APPLICANT: Presta, Leonard G.
; APPLICANT: Shahrokh, Zahra
; APPLICANT: Zapata, Gerardo A.
; TITLE OF INVENTION: METHODS OF TREATING INFLAMMATORY DISEASES
; WITH ANTI-IL-8 ANTIBODY FRAGMENT-POLYMER CONJUGATES
; NUMBER OF SEQUENCES: 72
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
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ZIP: 94080
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatIn (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/234,340A
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/121,952
FILING DATE: 24-Jul-1998
APPLICATION NUMBER: 60/074330
FILING DATE: 22-JAN-1998
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/075467
FILING DATE: 20-FEB-1998
ATTORNEY/AGENT INFORMATION:
NAME: Love, Richard B.
REGISTRATION NUMBER: 34,659
REFERENCE/DOCKET NUMBER: P1085R4
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-5530
TELEFAX: 650/952-9881
INFORMATION FOR SEQ ID NO: 50:
SEQUENCE CHARACTERISTICS:
LENGTH: 116 amino acids
TYPE: Amino Acid
TOPOLOGY: Linear
US-09-234-340A-50

Query Match 84.5%; Score 548.5; DB 2; Length 116;
Best Local Similarity 88.8%; Pred. No. 6.2e-47;
Matches 103; Conservative 2; Mismatches 10; Indels 1; Gaps 1;

QY 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHMNNVVRQAPGKGLWVGMIAPASSSTRY 60
DB 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHMNNVVRQAPGKGLWVGMIHPSDSETRY 60

QY 61 NQKFKDRFTISVDKSKNTLYLQNNSLRAEDTAVTYC-ARGIYFYGTTFYDYGQGT 115
DB 61 ADSVKGRFTISRDNKNTLYLQNNSLRAEDTAVTYCAARGIYFYGTTFYDYGQGT 116

RESULT 10
US-09-355-014-50
Sequence 50, Application US/093555014
Patent No. 6870033
GENERAL INFORMATION:
APPLICANT: Genentech, Inc., Hsai, Vanessa
Koumenis, Iphigenia
Leong, Steven R.
Presta, Leonard G.
Shahrokh, Zahra
Zapata, Gerardo A.
TITLE OF INVENTION: Antibody Fragment-Polymer Conjugates and Humanized Anti-IL-8 Monoclonal Antibodies
NUMBER OF SEQUENCES: 72
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech, Inc.
STREET: 1 DNA Way
CITY: South San Francisco
STATE: California
COUNTRY: USA
ZIP: 94080
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatIn (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/355,014

FILING DATE: 21-Jul-1999
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Love, Richard B.
REGISTRATION NUMBER: 34,659
REFERENCE/DOCKET NUMBER: P1085R3PCT
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-5530
TELEFAX: 650/952-9881
INFORMATION FOR SEQ ID NO: 50:
SEQUENCE CHARACTERISTICS:
LENGTH: 116 amino acids
TYPE: Amino Acid
TOPOLOGY: Linear
US-09-355-014-50

Query Match 84.5%; Score 548.5; DB 2; Length 116;
Best Local Similarity 88.8%; Pred. No. 6.2e-47;
Matches 103; Conservative 2; Mismatches 10; Indels 1; Gaps 1;

QY 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHMNNVVRQAPGKGLWVGMIAPASSSTRY 60
DB 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHMNNVVRQAPGKGLWVGMIHPSDSETRY 60

QY 61 NQKFKDRFTISVDKSKNTLYLQNNSLRAEDTAVTYC-ARGIYFYGTTFYDYGQGT 115
DB 61 ADSVKGRFTISRDNKNTLYLQNNSLRAEDTAVTYCAARGIYFYGTTFYDYGQGT 116

RESULT 11
US-07-934-373C-20
Sequence 20, Application US/07934373C
Patent No. 5821337
GENERAL INFORMATION:
APPLICANT: Paul J. Carter
APPLICANT: Leonard G. Presta
TITLE OF INVENTION: Immunoglobulin Variants
NUMBER OF SEQUENCES: 48
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech, Inc.
STREET: 1 DNA Way
CITY: South San Francisco
STATE: California
COUNTRY: USA
ZIP: 94080
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatIn (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/934,373C
FILING DATE: 21-Aug-1992
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US92/05126
FILING DATE: 15-JUN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/715272
FILING DATE: 14-JUN-1991
ATTORNEY/AGENT INFORMATION:
NAME: Lee, Wendy M.
REGISTRATION NUMBER: 40,378
REFERENCE/DOCKET NUMBER: P0709P2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-1994
TELEFAX: 650/952-9881
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 122 amino acids
TYPE: Amino Acid
TOPOLOGY: Linear

RESULT 14
US-09-705-686-20
; Sequence 20, Application US/09705686
; Patent No. 6639055
; GENERAL INFORMATION:
; APPLICANT: Carter, Paul J.
; Presta, Leonard G.
; TITLE OF INVENTION: Method for Making Humanized Antibodies
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WinPatIn (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09705.686
; FILING DATE: 02-Nov. 6639055-2000
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/146206
; FILING DATE: 17-NOV-1993
; APPLICATION NUMBER: 07/715272
; FILING DATE: 14-JUN-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Lee, Wendy M.
; REGISTRATION NUMBER: 40,378
; REFERENCE/DOCKET NUMBER: P0709P1D3
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-1994
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 20:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 122 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 20:
US-09-705-686-20
Query Match 80.2%; Score 520.5; DB 2; Length 122;
Best Local Similarity 83.7%; Pred. No. 3.9e-44;
Matches 103; Conservative 4; Mismatches 13; Indels 3; Gaps 2;
QY 1 EVLVESGGGLVPGGSLRLSCLAAAGYSFTGHNNWVRQAPGKLEWVGMIAPASSSTRY 60
DB 1 EVLVESGGGLVPGGSLRLSCLAAAGYSFTGHNNWVRQAPGKLEWVGMIAPASSSTRY 60
QY 61 NQKFKDRFTISVDKSKNTLYLQNSLRAEDTAVYVCARGIFYGTT--YEDYWGQGTTLVT 118
DB 61 NQKFKDRFTISVDKSKNTLYLQNSLRAEDTAVYVCARGIFYGTT--YEDYWGQGTTLVT 118
QY 119 VSS 121
DB 120 VSS 122
Search completed: April 13, 2006, 17:20:46
Job time : 36.4017 secs

RESULT 15
US-09-705-392A-20
; Sequence 20, Application US/09705392A
; Patent No. 6719971
; GENERAL INFORMATION:
; APPLICANT: Carter, Paul J.
; Presta, Leonard G.
; TITLE OF INVENTION: Method for Making Humanized Antibodies
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.

STREET: 1 DNA Way
CITY: South San Francisco
STATE: California
COUNTRY: USA
ZIP: 94080
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatIn (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09705.392A
FILING DATE: 02-Nov. 6719971-2002
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/146206
FILING DATE: 17-NOV-1993
APPLICATION NUMBER: 07/715272
FILING DATE: 14-JUN-1991
ATTORNEY/AGENT INFORMATION:
NAME: Lee, Wendy M.
REGISTRATION NUMBER: 40,378
REFERENCE/DOCKET NUMBER: P0709P1D1 REVISED
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-1994
TELEFAX: 650/952-9881
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 122 amino acids
TYPE: Amino Acid
TOPOLOGY: Linear
SEQUENCE DESCRIPTION: SEQ ID NO: 20:
US-09-705-392A-20
Query Match 80.2%; Score 520.5; DB 2; Length 122;
Best Local Similarity 83.7%; Pred. No. 3.9e-44;
Matches 103; Conservative 4; Mismatches 13; Indels 3; Gaps 2;
QY 1 EVLVESGGGLVPGGSLRLSCLAAAGYSFTGHNNWVRQAPGKLEWVGMIAPASSSTRY 60
DB 1 EVLVESGGGLVPGGSLRLSCLAAAGYSFTGHNNWVRQAPGKLEWVGMIAPASSSTRY 60
QY 61 NQKFKDRFTISVDKSKNTLYLQNSLRAEDTAVYVCARGIFYGTT--YEDYWGQGTTLVT 118
DB 61 NQKFKDRFTISVDKSKNTLYLQNSLRAEDTAVYVCARGIFYGTT--YEDYWGQGTTLVT 118
QY 119 VSS 121
DB 120 VSS 122
Search completed: April 13, 2006, 17:20:46
Job time : 36.4017 secs

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CM protein - protein search, using sw model

Run on: April 13, 2006, 17:05:24 ; Search time 246.227 Seconds
(without alignments)
215.918 Million cell updates/sec

Title: US-10-727-737-17

Perfect score: 649

Sequence: 1 EVQLVESGGLVPGGSLRL.....FYGTTFDYWGQTLVTVSS 121

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 2443163 seqs, 439378781 residues

Total number of hits satisfying chosen parameters: 2443163

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

A_Geneseq_21.*

1: Geneseqp1980s.*

2: Geneseqp1990s.*

3: Geneseqp2000s.*

4: Geneseqp2001s.*

5: Geneseqp2002s.*

6: Geneseqp2003as.*

7: Geneseqp2003bs.*

8: Geneseqp2004s.*

9: Geneseqp2005s.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	649	100.0	121	2 AAW62019	Aaw62019 Rhesuise
2	649	100.0	121	2 AAW63542	Aaw63542 Murine MH
3	649	100.0	121	3 AAY82348	Aay82348 Rhesuise
4	649	100.0	121	8 ADG39012	Adg39012 Rhesuise
5	649	100.0	121	8 ADR03380	Adr03380 Rhesuise
6	632	97.4	121	2 AAW62013	Aaw62013 Heavy cha
7	632	97.4	121	2 AAW63532	Aaw63532 Humanised
8	632	97.4	121	3 AAY82336	Aay82336 Humanised
9	632	97.4	121	8 ADG38993	Adg38993 Humanised
10	632	97.4	121	8 ADR03368	Adr03368 Humanised
11	632	97.4	121	8 ADW38458	Adw38458 CD11a hea
12	632	97.4	121	9 ADX80646	Adx80646 Humanized
13	632	97.4	451	8 ADF11670	Adf11670 anti-CD11
14	548.5	84.5	116	2 AAY29452	Aay29452 Human IGG
15	548.5	84.5	116	3 AAY77755	Aay77755 Human IGG
16	548.5	84.5	116	3 AAB30312	Aab30312 Human IGG
17	548.5	84.5	116	6 ABU13789	Abu13789 Human IGG
18	548.5	84.5	116	6 ABUS9502	Abu59502 Human IGG
19	548.5	84.5	116	7 AAE39085	Aae39085 Human IGG
20	520.5	80.2	122	2 AAR30772	Aar30772 huxCD3v9,
21	516.5	79.6	122	8 ADP79574	Adp79574 Humanised
22	516.5	79.6	122	8 ADS33302	Ads33302 Anti-CD20
23	516.5	79.6	122	8 ADW03408	Adw03408 Humanized
24	516.5	79.6	122	9 ADW21310	Adw21310 Mouse ant

RESULT 1

AAW62019

ID AAW62019 standard; peptide; 121 AA.

XX AC AAW62019;

XX DT

XX DT 01-OCT-1998 (first entry)

XX DE

XX DE Rhesuised heavy chain of humanised anti-CD11a antibody.

XX KW

XX KW Complementarity determining region; heavy chain variable region;

XX KW humanised antibody; MHM24F(ab)-8; anti-CD11a antibody;

XX KW human CD11a I domain; MHM24 epitope; alpha subunit;

XX KW lymphocyte function-associated antigen 1; LFA-1; immunoassay;

XX KW in vivo imaging; diagnosis; CD11a-associated disease.

XX OS

XX OS Unidentified.

XX PN

XX PN WO9823761-A1.

XX PD

XX PD 04-JUN-1998.

XX PF

XX PF 20-OCT-1997; 97WO-US019041.

XX PR

XX PR 27-NOV-1996; 96US-00757205.

XX PA

XX PA (GETH) GENENTECH INC.

XX PI

XX PI Jardieu PM, Presta LG;

XX DR

XX DR WPI; 1998-322737/28.

XX PT

XX PT New humanised anti-CD11a antibody - used in immunoassays for CD11a, and

XX PT also to treat conditions such as immunological or inflammatory disease.

XX PS

XX PS Disclosure; Page 56; 66pp; English.

XX CC

XX CC The present sequence represents the heavy chain of a "rhesuised" (sic)

XX CC humanised anti-CD11a antibody that binds specifically to the human CD11a

XX CC I domain (MHM24 epitope). CD11a refers to the alpha subunit of lymphocyte

XX CC function-associated antigen 1 (LFA-1) from any mammal. The humanised anti

XX CC -CD11a antibodies are used to determine presence of CD11a in usual

XX CC immunoassays or by in vivo imaging, particularly for diagnosis of CD11a-

XX CC associated diseases (typically immune responses and inflammation such as

XX CC psoriasis, Crohn's disease, rheumatoid arthritis, transplant rejection,

XX CC leukaemia, etc

XX CC

XX CC

SQ Sequence 121 AA;
 Query Match 100.0%; Score 649; DB 2; Length 121;
 Best Local Similarity 100.0%; Pred. No. 1.7e-49;
 Matches 121; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKLEWVGMIAPASSSTRY 60
 |||||
 Db 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKLEWVGMIAPASSSTRY 60
 |||||

QY 61 NQKFKDRFTISVDKSKNTLYLQNSLRAEDTAVYICARGIYFYGTTFDYWGQGLTVTVS 120
 |||||
 Db 61 NQKFKDRFTISVDKSKNTLYLQNSLRAEDTAVYICARGIYFYGTTFDYWGQGLTVTVS 120
 |||||

QY 121 S 121
 |
 Db 121 S 121

RESULT 2
 AAW63542
 ID AAW63542 standard; protein; 121 AA.
 XX
 AC AAW63542;
 DT 06-OCT-1998 (first entry)
 XX Murine M24 heavy chain variable domain mutant.
 DE
 XX Antibody mutant production; species-dependent antibody; malignancy;
 KW infection; haematopoiesis; lymphocyte function-associated antigen-1;
 KW intercellular adhesion molecule-1; inflammatory disease; CD11a; therapy;
 KW autoimmune disease; transplant rejection; tumour cell invasion;
 KW human immune deficiency virus infection; heavy chain.
 XX
 XX Synthetic.
 OS Mus sp.
 XX WO9823746-A1.
 XX
 XX 04-JUN-1998.
 PD
 XX 29-OCT-1997; 97WO-US020169.
 XX
 XX 27-NOV-1996; 96US-00756150.
 XX
 XX (GETH) GENENTECH INC.
 PA
 XX Jardieu PM, Presta LG;
 PI
 XX WPI; 1998-322726/28.
 XX
 XX Mutants of species-dependent antibodies with affinity for non-human
 PT mammalian antigen - greater than for parent antibody, particularly used
 PT for pre-clinical trial(s) in rhesus monkey(s) of therapeutic antibodies
 PT directed against CD11a.
 XX
 XX Claim 13; Page 59-60; 71pp; English.
 PS
 XX This sequence represents the heavy chain variable domain of a mutant
 CC murine antibody MM24 of the invention. The mutants are of a species-
 CC dependent antibody (Ab), and have an amino acid substitution in a
 CC variable region of the Ab, and binding affinity for an antigen (Ag) from
 CC a non-human mammal at least 10 times stronger than for the wild type Ab
 CC against the Ag. The mutant antibodies are particularly intended for
 CC administration to a non-human mammal in preclinical studies (e.g. of
 CC infection, immunity, haematopoiesis or transplantation). They can also be
 CC used diagnostically (to identify specific proteins) or therapeutically,
 CC e.g. where directed against CD11a (lymphocyte function-associated antigen
 CC -1) or intercellular adhesion molecule-1 against a wide variety of
 CC inflammatory or autoimmune diseases, malignancies, transplant rejection,
 CC human immune deficiency virus infection and tumour cell invasion.
 CC Conversion to the mutant form allows useful antibodies to be produced

CC from antibodies which normally have affinity for non-human analogues of
 CC the Ag too low to be of any use
 XX
 SQ Sequence 121 AA;
 Query Match 100.0%; Score 649; DB 2; Length 121;
 Best Local Similarity 100.0%; Pred. No. 1.7e-49;
 Matches 121; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKLEWVGMIAPASSSTRY 60
 |||||
 Db 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKLEWVGMIAPASSSTRY 60
 |||||

QY 61 NQKFKDRFTISVDKSKNTLYLQNSLRAEDTAVYICARGIYFYGTTFDYWGQGLTVTVS 120
 |||||
 Db 61 NQKFKDRFTISVDKSKNTLYLQNSLRAEDTAVYICARGIYFYGTTFDYWGQGLTVTVS 120
 |||||

QY 121 S 121
 |
 Db 121 S 121

RESULT 3
 AAY82348
 ID AAY82348 standard; protein; 121 AA.
 XX
 AC AAY82348;
 XX
 DT 22-JUN-2000 (first entry)
 XX Rhesusised antibody mutant heavy chain SEQ ID NO:24.
 DE
 XX Humanised; anti-CD11a; antibody; anti-inflammatory; immunosuppressant;
 KW antitumour; antiviral; inflammation; immunological response; LFA-1;
 KW lymphocyte function-associated antigen-1; psoriasis; rhinitis; eczema;
 KW inflammatory bowel disease; systemic lupus erythematosus; leukaemia;
 KW viral infection; transplant rejection; graft rejection.
 XX
 XX Macaca mulatta.
 OS Mus sp.
 XX US6037454-A.
 XX
 XX 14-MAR-2000.
 PD
 XX 20-NOV-1997; 97US-00974899.
 XX
 XX 27-NOV-1996; 96US-0031971P.
 XX
 XX (GETH) GENENTECH INC.
 PA
 XX Jardieu PM, Presta LG;
 PI
 XX WPI; 2000-282241/24.
 XX
 XX New humanized anti-CD11a antibody, useful for treating or preventing e.g.
 PT inflammation and transplant rejection, contains human heavy variable
 PT region complementarity determining regions.
 XX
 XX Example; Fig 1; 38pp; English.
 PS
 XX The present invention describes a humanised anti-CD11a antibody (Ab) that
 CC binds specifically to the human CD11a I-domain. The Ab has anti-
 CC inflammatory, immunosuppressant, antitumour and antiviral activities. The
 CC Ab blocks lymphocyte function-associated antigen (LFA-1) which is
 CC involved in leucocyte adhesion associated with inflammatory and
 CC immunological responses. The Ab are used: (i) optionally when coupled to
 CC a cytotoxin, to treat or prevent disorders mediated by lymphocyte
 CC function-associated antigen-1 (LFA-1; CD11a/CD18), e.g. psoriasis,
 CC inflammatory bowel disease, eczema, systemic lupus erythematosus,
 CC rhinitis, leukaemia, viral infections and many others, also for
 CC inhibiting graft rejection; (ii) when labeled, to detect CD11a; (iii) for
 CC tumour pretreatment; (iv) for delivery of enzymes that convert prodrugs

CC to active anticancer agent; and (v) for affinity chromatography. The Ab
 CC retain about the same activity in adhesion and mixed lymphocyte response
 CC assays as the murine antibodies from which they are derived. The murine
 CC anti-CD11a antibody MM24 has IC50 0.09 nM for preventing adhesion
 CC between Jurkat cells (expressing LFA-1) and normal epidermal
 CC keratinocytes that express ICAM-1 (intracellular adhesion molecule-1).
 CC The fully humanized version of MM24 had IC50 0.13 nM. The present
 CC sequence represents the amino acid sequence of a rhesusised antibody
 CC mutant heavy chain, which is used in the exemplification of the present
 CC invention
 XX
 SQ Sequence 121 AA;

Query Match 100.0%; Score 649; DB 3; Length 121;
 Best Local Similarity 100.0%; Pred. No. 1.7e-49;
 Matches 121; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Q/ 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHMMNVRQAPGKLEWVGMIAPASSSTRY 60
 |||||
 Db 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHMMNVRQAPGKLEWVGMIAPASSSTRY 60
 |||||
 Q/ 61 NQKPKDRFTISVDKSKNTLYLQNNSLRAEDTAVYVCARGIYFYGTTFDYWGQGLTVTVS 120
 |||||
 Db 61 NQKPKDRFTISVDKSKNTLYLQNNSLRAEDTAVYVCARGIYFYGTTFDYWGQGLTVTVS 120
 |||||

Q/ 121 S 121
 ||
 Db 121 S 121

RESULT 4
 ADG39012
 ID ADG39012 standard; protein; 121 AA.

XX AC ADG39012;

XX DT 26-FEB-2004 (first entry)

XX DE Rhesusised mouse anti-CD11a I-domain antibody VL.

XX KW Mouse; CD11a; I-domain; monoclonal antibody;
 XX cluster of differentiation 11a; mixed lymphocyte response assay;
 XX Jurkat cell; epidermal keratinocyte; intercellular adhesion molecule;
 XX ICAM-1; lymphocyte function-associated antigen 1 mediated disorder;
 XX psoriasis; Crohn's disease; ulcerative colitis; dermatitis; asthma;
 XX rheumatoid arthritis; systemic lupus erythematosus; multiple sclerosis;
 XX diabetes mellitus; prodrug activating enzyme.

XX JS Synthetic.

XX OS Mus sp.

XX PN US2003207336-A1.

XX PD 06-NOV-2003.

XX PF 28-FEB-2001; 2001US-00795798.

XX PR 27-NOV-1996; 96US-0031971P.

XX PR 20-NOV-1997; 97US-00974899.

XX PR 20-OCT-1999; 99US-00420745.

XX PA (GETH) GENENTECH INC.

XX PI Jardieu PM, Presta LG;

XX DR WPI; 2004-051511/05.

XX PT Humanized anti-CD11a antibody useful for treating lymphocyte function-
 XX associated antigen mediated disorder e.g. psoriasis, Crohns disease,
 XX ulcerative colitis, dermatitis, asthma, rheumatoid arthritis.

XX PS Example; SEQ ID NO 24; 43pp; English.

XX

CC The invention relates to a Humanised anti-cluster of differentiation
 CC (CD)11a antibody having specificity to human CD11a I-domain or CD11a with
 CC a kd value of not more than 1x10⁻⁸ M, or concentration for 50 %
 CC inhibition (IC50) (nM) value of not more than 1 nM in mixed lymphocyte
 CC response assay or for preventing adhesion of Jurkat cells to normal human
 CC epidermal keratinocytes expressing intercellular adhesion molecule (ICAM)
 CC -1. Also included are a kit comprising the antibody and instructions for
 CC use to detect the CD11a protein, an isolated nucleic acid encoding the
 CC antibody, a vector comprising the nucleic acid, a host cell comprising
 CC the vector and producing the antibody by culturing the cell so that the
 CC antibody is expressed. The antibody binds to epitope MM24 on CD11a. The
 CC antibody is useful for determining the presence of CD11a protein and for
 CC treating lymphocyte function-associated antigen 1 mediated disorder such
 CC as psoriasis, Crohn's disease, ulcerative colitis, dermatitis, asthma,
 CC rheumatoid arthritis, systemic lupus erythematosus, multiple sclerosis
 CC and diabetes mellitus. The antibody is useful when conjugated to a
 CC prodrug activating enzyme, or as an affinity purification agent. The
 CC present sequence is the light chain of a rhesusised anti-CD11a antibody of
 CC the invention.

XX SQ Sequence 121 AA;

Query Match 100.0%; Score 649; DB 8; Length 121;
 Best Local Similarity 100.0%; Pred. No. 1.7e-49;
 Matches 121; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Q/ 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHMMNVRQAPGKLEWVGMIAPASSSTRY 60
 |||||
 Db 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHMMNVRQAPGKLEWVGMIAPASSSTRY 60
 |||||

Q/ 61 NQKPKDRFTISVDKSKNTLYLQNNSLRAEDTAVYVCARGIYFYGTTFDYWGQGLTVTVS 120
 |||||
 Db 61 NQKPKDRFTISVDKSKNTLYLQNNSLRAEDTAVYVCARGIYFYGTTFDYWGQGLTVTVS 120
 |||||

Q/ 121 S 121
 ||
 Db 121 S 121

RESULT 5

ADRO3380
 ID ADRO3380 standard; protein; 121 AA.

XX AC ADRO3380;

XX DT 21-OCT-2004 (first entry)

XX DE Rhesusised MM24 antibody variable heavy chain mutant protein.

XX KW CD11a antibody; human immunodeficiency virus infection; HIV infection;
 XX rhinovirus infection; inflammatory skin disease; psoriasis;
 KW inflammatory bowel disease; Crohn's disease; ulcerative colitis;
 KW adult respiratory distress syndrome; allergic disease; eczema; asthma;
 KW autoimmune disease; rheumatoid arthritis; systemic lupus erythematosus;
 KW SLE; diabetes mellitus; Reynaud's syndrome; immunological disease;
 KW tuberculosis; sarcoidosis; polymyositis;
 KW chronic obstructive pulmonary disease; COPD; CNS inflammatory disorder;
 KW skin hypersensitivity disorder; poison ivy; poison oak;
 KW B-cell malignancy; chronic lymphocytic leukaemia; hairy cell leukaemia;
 KW graft versus host disease; cancer; gene therapy;
 KW murine anti-human CD11a monoclonal antibody; MM24; variable heavy chain;
 VH; murine; rhesus macaque; fusion protein; mutant; mutein.

XX OS Mus sp.

XX OS Macaca mulatta.

XX OS Chimeric.

XX XX US2004146507-A1.

XX XX 29-JUL-2004.

XX PF 03-DEC-2003; 2003US-00727737.

XX

PR 27-NOV-1996; 96US-0031945P.
 PR 20-NOV-1997; 97US-00975329.
 PA (GETH) GENENTECH INC.
 PI Jardieu PM, Presta LG;
 XX WPI; 2004-552640/53.
 XX
 XX New antibody mutant of a species-dependent antibody, useful for treating
 PT and preventing infectious diseases, psoriasis, inflammatory bowel
 PT disease, allergic conditions, autoimmune diseases, or cancer.
 XX
 XX Example; SEQ ID NO 17; 54pp; English.
 XX
 CC The present invention relates to an antibody mutant of a species-
 CC dependent antibody with beneficial properties. The invention is useful
 CC for treating and preventing infectious diseases such as human
 CC immunodeficiency virus (HIV) and rhinovirus infections, inflammatory skin
 CC disease such as psoriasis, inflammatory bowel diseases such as Crohn's
 CC disease and ulcerative colitis, adult respiratory distress syndrome,
 CC allergic diseases such as eczema and asthma, autoimmune diseases such as
 CC rheumatoid arthritis, systemic lupus erythematosus (SLE), diabetes
 CC mellitus, Reynaud's syndrome, immunological diseases such as
 CC tuberculosis, sarcoidosis, polymyositis and chronic obstructive pulmonary
 CC disease (COPD), CNS inflammatory disorder, skin hypersensitivity
 CC disorders such as poison ivy and poison oak, B-cell malignancies such as
 CC chronic lymphocytic leukaemia and hairy cell leukaemia, graft versus host
 CC disease and cancer. The invention is also useful in gene therapy. The
 CC present sequence is rheusised murine anti-human CD11a monoclonal
 CC antibody (MHM24) variable heavy chain protein. This sequence is used in
 CC the exemplification of the invention.
 XX
 SQ Sequence 121 AA;
 Query Match 100.0%; Score 649; DB 8; Length 121;
 Best Local Similarity 100.0%; Pred. No. 1.7e-49;
 Matches 121; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKLEWVGMIAPASSSTRY 60
 DB 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKLEWVGMIAPASSSTRY 60
 QY 61 NQKFKDRFTTISVDKSKNTLYLQWNSLRAEDTAVYVCARGIFYGTTTFDYWGQGLTVTS 120
 DB 61 NQKFKDRFTTISVDKSKNTLYLQWNSLRAEDTAVYVCARGIFYGTTTFDYWGQGLTVTS 120
 QY 121 S 121
 DB 121 S 121
 RESULT 6
 AAW62013
 ID AAW62013 standard; peptide; 121 AA.
 XX
 AC AAW62013;
 XX
 DT 01-OCT-1998 (first entry)
 XX
 DE Heavy chain variable region of humanised anti-CD11a antibody.
 XX
 KW Complementarity determining region; heavy chain variable region;
 KW humanised antibody; MHM24Fab-8; anti-CD11a antibody;
 KW human CD11a I domain; MHM24 epitope; alpha subunit;
 KW lymphocyte function-associated antigen 1; LFA-1; immunoassay;
 KW in vivo imaging; diagnosis; CD11a-associated disease.
 XX
 XX Mus sp.
 OS
 OS Homo sapiens.
 XX
 XX W09823761-A1.
 XX

PD 04-JUN-1998.
 XX 20-OCT-1997; 97WO-US019041.
 XX
 PR 27-NOV-1996; 96US-00757205.
 XX
 PA (GETH) GENENTECH INC.
 XX
 PI Jardieu PM, Presta LG;
 XX WPI; 1998-322737/28.
 DR
 XX New humanised anti-CD11a antibody - used in immunoassays for CD11a, and
 PT also to treat conditions such as immunological or inflammatory disease.
 XX
 XX Claim 7; Page 50; 66pp; English.
 XX
 CC The present sequence represents the heavy chain variable region of a
 CC humanised anti-CD11a antibody that binds specifically to the human CD11a
 CC I domain (MHM24 epitope). CD11a refers to the alpha subunit of lymphocyte
 CC function-associated antigen 1 (LFA-1) from any mammal. The humanised anti
 CC CD11a antibodies are used to determine presence of CD11a in usual
 CC immunoassays or by in vivo imaging, particularly for diagnosis of CD11a-
 CC associated diseases (typically immune responses and inflammation such as
 CC psoriasis, Crohn's disease, rheumatoid arthritis, transplant rejection,
 CC leukaemia, etc
 XX
 SQ Sequence 121 AA;
 Query Match 97.4%; Score 632; DB 2; Length 121;
 Best Local Similarity 96.7%; Pred. No. 5.4e-48;
 Matches 117; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
 QY 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKLEWVGMIAPASSSTRY 60
 DB 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKLEWVGMIHPDSESTRY 60
 QY 61 NQKFKDRFTTISVDKSKNTLYLQWNSLRAEDTAVYVCARGIFYGTTTFDYWGQGLTVTS 120
 DB 61 NQKFKDRFTTISVDKSKNTLYLQWNSLRAEDTAVYVCARGIFYGTTTFDYWGQGLTVTS 120
 QY 121 S 121
 DB 121 S 121
 RESULT 7
 AAW63532
 ID AAW63532 standard; protein; 121 AA.
 XX
 AC AAW63532;
 XX
 DT 06-OCT-1998 (first entry)
 XX
 DE Humanised MHM24 heavy chain.
 XX
 KW Antibody mutant production; species-dependent antibody; malignancy;
 KW infection; haematopoiesis; lymphocyte function-associated antigen-1;
 KW intercellular adhesion molecule-1; inflammatory disease; CD11a; therapy;
 KW autoimmune disease; transplant rejection; tumour cell invasion;
 KW human immune deficiency virus infection; heavy chain.
 XX
 OS Synthetic.
 XX
 XX W09823746-A1.
 XX
 PD 04-JUN-1998.
 XX
 XX 29-OCT-1997; 97WO-US020169.
 XX
 XX 27-NOV-1996; 96US-00756150.
 XX
 XX (GETH) GENENTECH INC.

XX Jardieu PM, Presta LG;
 XX WPI; 1998-322726/28.
 XX Mutants of species-dependent antibodies with affinity for non-human
 XX mammalian antigen - greater than for parent antibody, particularly used
 XX for pre-clinical trial(s) in rhesus monkey(s) of therapeutic antibodies
 XX directed against CD11a.
 XX Disclosure; Page 55; 71pp; English.
 XX This sequence represents the heavy chain of the humanised antibody MEM24,
 XX and was used to produce a mutant of the invention. The mutants are of a
 XX species-dependent antibody (Ab), and have an amino acid substitution in a
 XX variable region of the Ab, and binding affinity for an antigen (Ag) from
 XX a non-human mammal at least 10 times stronger than for the wild type Ab
 XX against the Ag. The mutant antibodies are particularly intended for
 XX administration to a non-human mammal in preclinical studies (e.g. of
 XX infection, immunity, haematopoiesis or transplantation). They can also be
 XX used diagnostically (to identify specific proteins) or therapeutically,
 XX e.g. where directed against CD11a (lymphocyte function-associated antigen
 XX -1) or intercellular adhesion molecule-1 against a wide variety of
 XX inflammatory or autoimmune diseases, malignancies, transplant rejection,
 XX human immune deficiency virus infection and tumour cell invasion.
 XX Conversion to the mutant form allows useful antibodies to be produced
 XX from antibodies which normally have affinity for non-human analogues of
 XX the Ag too low to be of any use
 XX Sequence 121 AA;
 SQ
 Query Match 97.4%; Score 632; DB 2; Length 121;
 Best Local Similarity 96.7%; Pred. No. 5.4e-48;
 Matches 117; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
 QY 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKGLVWGMIAPASSSTRY 60
 DB 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKGLVWGMIHPDSSTRY 60
 QY 61 NQPKDRFTTISVDKSKNTLYLQNSLRADTAVVYCARGIYFYGTTFDYWGQGLTVTVS 120
 DB 61 NQPKDRFTTISVDKSKNTLYLQNSLRADTAVVYCARGIYFYGTTFDYWGQGLTVTVS 120
 QY 121 S 121
 DB 121 S 121
 RESULT 8
 ID AAY82336
 XX AAY82336 standard; protein; 121 AA.
 XX AAY82336;
 XX 22-JUN-2000 (first entry)
 XX Humanised anti-CD11a antibody heavy chain variable region SEQ ID NO:5.
 XX Humanised; anti-CD11a; antibody; anti-inflammatory; immunosuppressant;
 XX antitumour; antiviral; inflammation; immunological response; LFA-1;
 XX lymphocyte function-associated antigen-1; psoriasis; rhinitis; eczema;
 XX inflammatory bowel disease; systemic lupus erythematosus; leukaemia;
 XX viral infection; transplant rejection; graft rejection.
 XX Homo sapiens.
 OS Mus sp.
 XX US6037454-A.
 XX 14-MAR-2000.
 XX 20-NOV-1997; 97US-00974899.
 XX

PR 27-NOV-1996; 96US-0031971P.
 XX (GETH) GENENTECH INC.
 XX Jardieu PM, Presta LG;
 XX WPI; 2000-282241/24.
 XX New humanized anti-CD11a antibody, useful for treating or preventing e.g.
 XX inflammation and transplant rejection, contains human heavy variable
 XX region complementarity determining regions.
 XX Claim 1; Fig 1; 38pp; English.
 XX The present invention describes a humanised anti-CD11a antibody (Ab) that
 XX binds specifically to the human CD11a I-domain. The Ab has anti-
 XX inflammatory, immunosuppressant, antitumour and antiviral activities. The
 XX Ab blocks lymphocyte function-associated antigen (LFA-1) which is
 XX involved in leucocyte adhesion associated with inflammatory and
 XX immunological responses. The Ab are used: (i) optionally when coupled to
 XX a cytotoxin, to treat or prevent disorders mediated by lymphocyte
 XX function-associated antigen-1 (LFA-1; CD11a/CD18), e.g. psoriasis,
 XX inflammatory bowel disease, eczema, systemic lupus erythematosus,
 XX rhinitis, leukaemia, viral infections and many others, also for
 XX inhibiting graft rejection; (ii) when labeled, to detect CD11a; (iii) for
 XX tumour pretreatment; (iv) for delivery of enzymes that convert prodrugs
 XX to active anticancer agent; and (v) for affinity chromatography. The Ab
 XX retain about the same activity in adhesion and mixed lymphocyte response
 XX assays as the murine antibodies from which they are derived. The murine
 XX anti-CD11a antibody MEM24 has IC50 0.09 nM for preventing adhesion
 XX between Jurkat cells (expressing LFA-1) and normal epidermal
 XX keratinocytes that express ICAM-1 (intracellular adhesion molecule-1).
 XX The fully humanized version of MEM24 had IC50 0.13 nM. The present
 XX sequence represents the heavy chain variable region of the humanised anti
 XX -CD11a Ab
 XX Sequence 121 AA;
 SQ
 Query Match 97.4%; Score 632; DB 3; Length 121;
 Best Local Similarity 96.7%; Pred. No. 5.4e-48;
 Matches 117; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
 QY 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKGLVWGMIAPASSSTRY 60
 DB 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKGLVWGMIHPDSSTRY 60
 QY 61 NQPKDRFTTISVDKSKNTLYLQNSLRADTAVVYCARGIYFYGTTFDYWGQGLTVTVS 120
 DB 61 NQPKDRFTTISVDKSKNTLYLQNSLRADTAVVYCARGIYFYGTTFDYWGQGLTVTVS 120
 QY 121 S 121
 DB 121 S 121
 RESULT 9
 ADG38993
 ID ADG38993 standard; protein; 121 AA.
 XX ADG38993;
 XX 26-FEB-2004 (first entry)
 XX Humanised Mouse anti-CD11a antibody heavy chain variable region.
 XX Mouse; CD11a; I-domain; monoclonal antibody; heavy chain variable region;
 XX VH; cluster of differentiation 11a; mixed lymphocyte response assay;
 XX Jurkat cell; epidermal keratinocyte; intercellular adhesion molecule;
 XX ICAM-1; lymphocyte function-associated antigen 1 mediated disorder;
 XX psoriasis; Crohn's disease; ulcerative colitis; dermatitis; asthma;
 XX rheumatoid arthritis; systemic lupus erythematosus; multiple sclerosis;
 XX diabetes mellitus; prodrug activating enzyme; humanised.
 XX

OS Synthetic.
 OS Mus sp.
 PN US2003207336-A1.
 XX 06-NOV-2003.
 PD 28-FEB-2001; 2001US-00795798.
 XX 27-NOV-1996; 96US-0031971P.
 PR 20-NOV-1997; 97US-00374699.
 PR 20-OCT-1999; 99US-00420745.
 XX (GETH) GENENTECH INC.
 XX Jardieu PM, Presta LG;
 PI WPI; 2004-051511/05.
 DR Humanized anti-CD11a antibody useful for treating lymphocyte function-
 PT associated antigen mediated disorder e.g. psoriasis, Crohns disease,
 PT ulcerative colitis, dermatitis, asthma, rheumatoid arthritis.
 XX Claim 7; SEQ ID NO 5; 43pp; English.
 XX The invention relates to a Humanised anti-cluster of differentiation
 CC (CD)11a antibody having specificity to human CD11a I-domain or CD11a with
 CC a kd value of not more than 1x10⁻⁸ M, or concentration for 50 %
 CC inhibition (IC50) (nM) value of not more than 1 nM in mixed lymphocyte
 CC response assay or for preventing adhesion of Jurkat cells to normal human
 CC epidermal keratinocytes expressing intercellular adhesion molecule (ICAM)
 CC -1. Also included are a kit comprising the antibody and instructions for
 CC use to detect the CD11a protein, an isolated nucleic acid encoding the
 CC antibody, a vector comprising the nucleic acid, a host cell comprising
 CC the vector and producing the antibody by culturing the cell so that the
 CC antibody is expressed. The antibody binds to epitope MHM24 on CD11a. The
 CC antibody is useful for determining the presence of CD11a protein and for
 CC treating lymphocyte function-associated antigen 1 mediated disorder such
 CC as psoriasis, Crohn's disease, ulcerative colitis, dermatitis, asthma,
 CC rheumatoid arthritis, systemic lupus erythematosus, multiple sclerosis
 CC and diabetes mellitus. The antibody is useful when conjugated to a
 CC prodrug activating enzyme, or as an affinity purification agent. The
 CC present sequence is the heavy chain variable region (VH) of the humanised
 CC mouse anti-CD11a I domain monoclonal antibody MHM24.
 XX Sequence 121 AA;
 Query Match 97.4%; Score 632; DB 8; Length 121;
 Best Local Similarity 96.7%; Pred. No. 5.4e-48;
 Matches 117; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
 QY 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKLEWGMIAPASSSTRY 60
 Db 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKLEWGMIAPASSSTRY 60
 QY 61 NQKFKDRFTISVDKSKNTLYLQMSLRADTAVVYCARGIFYGTTTFDYWGQGTILVTVS 120
 Db 61 NQKFKDRFTISVDKSKNTLYLQMSLRADTAVVYCARGIFYGTTTFDYWGQGTILVTVS 120
 QY 121 S 121
 Db 121 S 121
 RESULT 10
 ID ADR03368
 XX ADR03368 standard; protein; 121 AA.
 AC ADR03368;
 XX 21-OCT-2004 (first entry)
 XX Humanised MHM24 F(ab)-8 antibody variable heavy chain protein.

XX CD11a antibody; human immunodeficiency virus infection; HIV infection;
 KW rhinovirus infection; inflammatory skin disease; psoriasis;
 KW inflammatory bowel disease; Crohn's disease; ulcerative colitis;
 KW adult respiratory distress syndrome; allergic disease; eczema; asthma;
 KW autoimmune disease; rheumatoid arthritis; systemic lupus erythematosus;
 KW SLE; diabetes mellitus; Reynaud's syndrome; immunological disease;
 KW tuberculosis; sarcoidosis; polymyositis;
 KW chronic obstructive pulmonary disease; COPD; CNS inflammatory disorder;
 KW skin hypersensitivity disorder; poison ivy; poison oak; hairy cell leukaemia;
 KW B-cell malignancy; chronic lymphocytic leukaemia; cancer; gene therapy;
 KW graft versus host disease; cancer; gene therapy;
 KW murine anti-human CD11a monoclonal antibody; MHM24; variable heavy chain;
 KW VH; murine; human; fusion protein.
 XX Mus sp.
 OS Homo sapiens.
 OS Chimeric.
 XX US2004146507-A1.
 XX 29-JUL-2004.
 PD 03-DEC-2003; 2003US-00727737.
 XX 27-NOV-1996; 96US-0031945P.
 PR 20-NOV-1997; 97US-00975329.
 XX (GETH) GENENTECH INC.
 XX Jardieu PM, Presta LG;
 PI WPI; 2004-552640/53.
 DR New antibody mutant of a species-dependent antibody, useful for treating
 XX and preventing infectious diseases, psoriasis, inflammatory bowel
 PT disease, allergic conditions, autoimmune diseases, or cancer.
 PS Example; SEQ ID NO 5; 54pp; English.
 XX The present invention relates to an antibody mutant of a species-
 CC dependent antibody with beneficial properties. The invention is useful
 CC for treating and preventing infectious diseases such as human
 CC immunodeficiency virus (HIV) and rhinovirus infections, inflammatory skin
 CC disease such as psoriasis, inflammatory bowel diseases such as Crohn's
 CC disease and ulcerative colitis, adult respiratory distress syndrome,
 CC allergic diseases such as eczema and asthma, autoimmune diseases such as
 CC rheumatoid arthritis, systemic lupus erythematosus (SLE), diabetes
 CC mellitus, Reynaud's syndrome, immunological diseases such as
 CC tuberculosis, sarcoidosis, polymyositis and chronic obstructive pulmonary
 CC disease (COPD), CNS inflammatory disorder, skin hypersensitivity
 CC disorders such as poison ivy and poison oak, B-cell malignancies such as
 CC chronic lymphocytic leukaemia and hairy cell leukaemia, graft versus host
 CC disease and cancer. The invention is also useful in gene therapy. The
 CC present sequence is humanised murine anti-human CD11a monoclonal antibody
 CC (MHM24) F(ab)-8 variable heavy chain protein. This sequence is used in
 CC the exemplification of the invention.
 XX Sequence 121 AA;
 Query Match 97.4%; Score 632; DB 8; Length 121;
 Best Local Similarity 96.7%; Pred. No. 5.4e-48;
 Matches 117; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
 QY 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKLEWGMIAPASSSTRY 60
 Db 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKLEWGMIAPASSSTRY 60
 QY 61 NQKFKDRFTISVDKSKNTLYLQMSLRADTAVVYCARGIFYGTTTFDYWGQGTILVTVS 120
 Db 61 NQKFKDRFTISVDKSKNTLYLQMSLRADTAVVYCARGIFYGTTTFDYWGQGTILVTVS 120
 QY 121 S 121

Db 121 S 121

RESULT 11

ADW38458

ID ADW38458 standard; protein; 121 AA.

XX AC

XX ADW38458;

XX 24-MAR-2005 (first entry)

XX DE CD11a heavy chain variable region #2.

XX KW monoclonal antibody; CD11a; light-chain variable region;

XX KW heavy-chain variable region.

XX OS Homo sapiens.

XX PN CN1439651-A.

XX PD 03-SEP-2003.

XX PF 20-FEB-2002; 2002CN-00110866.

XX PR 20-FEB-2002; 2002CN-00110866.

XX PA (ZHON-) ZHONGXIN GUOJIAN PHARM CO LTD SHANGHAI.

XX PI Wang H, Wang J;

XX WPI; 2004-169719/17.

XX PT Recombinant human CD11a monoclonal antibody and its preparation and medicinal composition.

XX PS Claim 1; Page 14-15; 16pp; Chinese.

XX CC The present invention relates to a recombinant monoclonal antibody for human CD11a has the amino acid sequence shown by SEQ ID No.1 or SEQ ID No.5 in light-chain variable region and the amino acid sequence shown by SEQ ID No.2 or SEQ ID No.6 in heavy-chain variable region. Its bioactivity and the expression in host cell are greatly increased. The DNA molecule for coding the antibody, its preparation process and the medicinal composition containing it are also disclosed. The present sequence represents a heavy chain variable region of human CD11a.

XX SQ Sequence 121 AA;

Query Match 97.4%; Score 632; DB 8; Length 121;

Best Local Similarity 96.7%; Pred. No. 5.4e-48;

Matches 117; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKLEWVGMIAPASSSTRY 60

Db 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKLEWVGMIHPSDSTRY 60

QY 61 NQPKDRFTTSVDKSKNTLYLQNNSLRAEDTAVVYCARGIFYGTYFDYWGQGLTVTS 120

Db 61 NQPKDRFTTSVDKSKNTLYLQNNSLRAEDTAVVYCARGIFYGTYFDYWGQGLTVTS 120

QY 121 S 121

Db 121 S 121

RESULT 12

ADX80646

ID ADX80646 standard; protein; 121 AA.

XX AC

XX ADX80646;

XX 05-MAY-2005 (first entry)

XX DE Humanized CD11a variable heavy chain amino acid sequence, seq id 6.

XX KW Protein purification; leaching; protein A affinity chromatography; CD11a; antibody.

XX OS Synthetic.

XX PN US2005038231-A1.

XX PD 17-FEB-2005.

XX PF 24-JUN-2004; 2004US-00877532.

XX PR 28-JUL-2003; 2003US-0490500P.

XX PA (GETH) GENENTECH INC.

XX PI Fahrner RL, Laverdiere A, Mcdonald PJ, Oleary RM;

XX DR WPI; 2005-172327/18.

XX CC Purifying a protein, e.g. antibody or immunoadhesin, comprises reducing the temperature of a composition subjected to protein A affinity chromatography to 3-20 degrees C, where protein A leaching is reduced.

XX PS Disclosure; SEQ ID NO 6; 27pp; English.

XX CC The invention relates to a method of purifying a protein which comprises a CH2/CH3 region by protein A affinity chromatography. The method involves reducing the temperature of a composition comprising the protein and one or more impurities subjected to protein A affinity chromatography to 3-20 degrees Celsius, where protein A leaching is reduced. Preferably, the protein is antibody. The antibody is selected from Trastuzumab, humanized 2C4, humanized CD11a antibody, and humanized VEGF antibody. Preferably, the antibody binds HER2 antigen, where the antibody is Trastuzumab or humanized 2C4. The protein is an immunoadhesin, specifically a TNF receptor immunoadhesin. The methods are useful for purifying a protein, which comprises a CH2/CH3 region by protein A affinity chromatography and for reducing leaching of protein A during protein A affinity chromatography. The current sequence represents the variable heavy chain amino acid sequence of CD11a.

XX SQ Sequence 121 AA;

Query Match 97.4%; Score 632; DB 9; Length 121;

Best Local Similarity 96.7%; Pred. No. 5.4e-48;

Matches 117; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKLEWVGMIAPASSSTRY 60

Db 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKLEWVGMIHPSDSTRY 60

QY 61 NQPKDRFTTSVDKSKNTLYLQNNSLRAEDTAVVYCARGIFYGTYFDYWGQGLTVTS 120

Db 61 NQPKDRFTTSVDKSKNTLYLQNNSLRAEDTAVVYCARGIFYGTYFDYWGQGLTVTS 120

QY 121 S 121

Db 121 S 121

RESULT 13

ADF11670

ID ADF11670 standard; protein; 451 AA.

XX AC

XX ADF11670;

XX 26-FEB-2004 (first entry)

XX DE anti-CD11a rhuMab heavy chain amino acid sequence #SEQ ID 4.

XX KW Purifying; target protein; non-affinity purification;

KW high-performance tangential flow filtration; HPTFF; pharmaceutical;
 KW diagnostic; therapeutic; antibody.
 OS Synthetic.
 XX WO2003102132-A2.
 XX 11-DEC-2003.
 XX 25-APR-2003; 2003WO-US013054.
 XX 26-APR-2002; 2002US-0375953P.
 XX (GETH) GENENTECH INC.
 XX Fahner RL, Follman D, Lebreton B, Van Reis R;
 XX WPI; 2004-043096/04.
 XX Purifying target protein from mixture containing host cell protein
 PT involves subjecting mixture to non-affinity purification, high-
 PT performance tangential flow filtration and isolating purified protein.
 XX Disclosure; SEQ ID NO 4; 77pp; English.
 XX The invention relates to a method for purifying a target protein from a
 CC mixture containing a host cell protein. This method comprises subjecting
 CC the mixture to a non-affinity purification followed by high-performance
 CC tangential flow filtration (HPTFF) and isolating the protein in a purity
 CC containing less than 100 parts/million (ppm) of the host cell protein,
 CC where the method of the invention includes no affinity purification
 CC process. The method of the invention is useful for purifying a target
 CC protein from a mixture containing a host cell protein, and is useful for
 CC incorporating the isolated protein into a pharmaceutical formulation.
 CC proteins purified using the method of the invention are useful in a
 CC pharmaceutical respect, and are also useful in various diagnostic and
 CC therapeutic purposes. The method of the invention is efficient in
 CC purifying a target protein from a mixture containing a host cell protein,
 CC and may also be effectively performed at low cost. The current sequence
 CC represents the anti-CD11a rhWAB heavy chain amino acid sequence. This
 CC particular protein was used to demonstrate the method of the invention.
 XX
 SQ Sequence 451 AA;
 Query Match 97.4%; Score 632; DB 8; Length 451;
 Best Local Similarity 96.7%; Pred. No. 2.1e-47;
 Matches 11; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
 Qy 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKLEWVGMIAPASSSTRY 60
 Db 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKLEWVGMIHPSDSETRY 60
 Qy 61 NQKPKDRPTISVDKSKNTLYLQNNLSRAEDTAVYCYARGIFYGTTFDYWGQGLTVTS 120
 Db 61 NQKPKDRPTISVDKSKNTLYLQNNLSRAEDTAVYCYARGIFYGTTFDYWGQGLTVTS 120
 Qy 121 S 121
 Db 121 S 121
 RESULT 14
 AAY29452
 ID AAY29452 standard; protein; 116 AA.
 XX AAY29452;
 XX 05-OCT-1999 (first entry)
 XX Human IgG1 subgroup III heavy chain variable domain.
 XX Antibody; humanised; anti-IL-8 monoclonal antibody; interleukin 8;
 KW diagnosis; inflammatory disorder; conjugate; immunoglobulin;
 XX

KW fusion protein.
 XX Homo sapiens.
 XX WO9937779-A1.
 XX 29-JUL-1999.
 XX 19-JAN-1999; 99WO-US001081.
 XX 22-JAN-1998; 98US-00012116.
 XX 20-FEB-1998; 98WO-US003337.
 XX 24-JUL-1998; 98US-00121952.
 XX 24-JUL-1998; 98US-00122513.
 XX (GETH) GENENTECH INC.
 XX Hsei V, Koumenis I, Leong SJ, Presta LG, Shahrokh Z, Zapata GA;
 XX WPI; 1999-469134/39.
 XX New conjugates of nonproteinaceous polymers with antibody fragments, used
 PT for treating inflammatory disorders.
 XX Disclosure; Fig 29; 360pp; English.
 XX The present invention describes a novel conjugate having one or more
 CC antibody fragments covalently attached to one or more nonproteinaceous
 CC polymer molecules, where the apparent size of the conjugate is at least
 CC about 500 kDa. Conjugates of antibody fragments which bind the human
 CC interleukin (IL) 8 with a nonproteinaceous polymer can be used for
 CC treating inflammatory disorders e.g. acute lung injury, ischaemic
 CC reperfusion disorder, and autoimmune diseases. They can also be used for
 CC treating e.g. inflammatory skin diseases including psoriasis and atopic
 CC dermatitis, systemic scleroderma and sclerosis, and asthmatic diseases.
 CC The conjugates can also be used as reagents in an animal model system for
 CC in vivo study of the biological functions of the antigen recognised by
 CC the conjugate. The present sequence represents the human IgG1 subgroup
 CC III heavy chain variable domain form the present invention
 XX
 SQ Sequence 116 AA;
 Query Match 84.5%; Score 548.5; DB 2; Length 116;
 Best Local Similarity 88.8%; Pred. No. 1.2e-40;
 Matches 103; Conservative 2; Mismatches 10; Indels 1; Gaps 1;
 Qy 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKLEWVGMIAPASSSTRY 60
 Db 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKLEWVGMIHPSDSETRY 60
 Qy 61 NQKPKDRPTISVDKSKNTLYLQNNLSRAEDTAVYCYARGIFYGTTFDYWGQGLTVTS 115
 Db 61 ADSVKGRFTISRDNKNTLYLQNNLSRAEDTAVYCYAARGIFYGTTFDYWGQGLTVTS 116
 RESULT 15
 AAY77755
 ID AAY77755 standard; protein; 116 AA.
 XX AAY77755;
 XX 06-JUN-2000 (first entry)
 XX Human IgG1 subgroup III heavy chain variable domain.
 XX Interleukin-8; IL-8; monoclonal antibody; MAb; anti-IL-8; 6G4.2.5V11N35A;
 KW inflammatory disorder; adult respiratory distress syndrome; chimeric;
 KW affinity purification; 6G4.2.5.
 XX Homo sapiens.
 XX US6025158-A.
 XX

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OM protein - protein search, using sw model

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Title: US-10-727-737-17
Perfect score: 649
Sequence: 1 EVQLVESGGLVQPGGSLRL.....FYGTTTFDYWGQGLTVTVSS 121

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues
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1: pir1:.*
2: pir2:.*
3: pir3:.*
4: pir4:.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	461	71.0	125	2 S30531	Ig heavy chain V r
2	461	71.0	140	2 S31686	Ig heavy chain V r
3	460.5	71.0	140	2 S70442	Ig heavy chain pre
4	459	70.7	140	2 S31588	Ig heavy chain V r
5	457.5	70.5	128	2 S26786	Ig heavy chain V r
6	457	70.4	121	2 S26798	Ig heavy chain V r
7	455	70.1	119	2 S31107	Ig heavy chain - h
8	454	70.0	119	2 S31108	Ig heavy chain - h
9	452.5	69.7	124	2 S20782	Ig heavy chain V r
10	451	69.5	143	2 S23624	Ig heavy chain V r
11	450.5	69.4	141	2 S31669	Ig heavy chain V r
12	450	69.3	123	2 S26794	Ig heavy chain V r
13	449.5	69.3	120	2 S48798	Ig heavy chain V r
14	448	69.0	121	2 S19666	Ig heavy chain V r
15	447.5	69.0	136	2 S1587	Ig heavy chain V r
16	447	68.9	120	2 S36273	Ig heavy chain V r
17	446.5	68.8	147	2 S37780	Ig variable region
18	446	68.7	121	2 S55673	Ig heavy chain - h
19	446	68.7	123	2 S31114	Ig heavy chain - h
20	443	68.3	119	2 S36005	Ig heavy chain V r
21	443	68.3	121	2 S36005	Ig heavy chain V r
22	443	68.3	132	2 S31603	Ig heavy chain V r
23	443	68.3	138	2 S31666	Ig heavy chain V r
24	442.5	68.2	119	1 AVMSX4	Ig heavy chain V r
25	442	68.1	117	2 S31109	Ig heavy chain - h
26	442	68.1	160	2 S05271	Ig heavy chain pre
27	441	68.0	117	2 S78486	Ig heavy chain V r
28	439	67.6	118	2 A47329	Ig heavy chain V r
29	439	67.6	119	2 D36005	Ig heavy chain V r

30	438.5	67.6	136	2 S13791	Ig heavy chain V r
31	438	67.5	120	2 S36278	Ig heavy chain V r
32	437.5	67.4	114	2 S31120	Ig heavy chain - h
33	437.5	67.4	119	1 AVMS76	Ig heavy chain V r
34	436	67.2	121	2 H36005	Ig heavy chain V r
35	435.5	67.1	128	2 S26790	Ig heavy chain V r
36	435	67.0	127	2 S38489	Ig heavy chain - h
37	435	67.0	135	2 S31598	Ig heavy chain V r
38	434	66.9	130	2 S31601	Ig heavy chain V r
39	433.5	66.8	119	1 AVMSJ5	Ig heavy chain V r
40	433.5	66.8	122	2 S20772	Ig heavy chain V r
41	433	66.7	117	2 S34012	Ig heavy chain V r
42	433	66.7	139	2 A25912	Ig heavy chain pre
43	432	66.6	134	2 S31699	Ig heavy chain V r
44	431.5	66.5	120	2 S44111	Ig heavy chain V-D
45	431.5	66.5	122	2 S31117	Ig heavy chain - h

ALIGNMENTS

RESULT 1

S30531
Ig heavy chain V region - human
C;Species: Homo sapiens (man)
C;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 31-Dec-2004
C;Accession: S30531
R;Marette, X.
submitted to the EMBL Data Library, October 1992
A;Reference number: S30520
A;Accession: S30531
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-125 <MAR>
A;Cross-references: UNIPROT:Q9UL91; UNIPARC:UPI0000176C10; EMBL:Z18317
C;Superfamily: immunoglobulin homology
C;Keywords: heterotetramer; immunoglobulin
F;15-98/Domain: immunoglobulin homology <IMM>

Query Match 71.0%; Score 461; DB 2; Length 125;
Best Local Similarity 72.0%; Pred. No. 5.6e-36;
Matches 90; Conservative 12; Mismatches 19; Indels 4; Gaps 1;
Qy 1 EVQLVESGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPFGKGLWVGMTPAPSSSTRY 60
Db 1 EVQLVESGGLVQPGGSLRLSCAASGFTSSYMNWVRQAPFGKGLWISYSSSSSTIY 60
Qy 61 NQKPKDRFTTSVDKSKVTLYLQMNLSRAEDTAVVYCARGIYF---YGTTFDYWGQGL 116
Db 61 ADSVKGRFTTSRDNAKNSLYLQMNLSRAEDTAVVYCARSRNYDSGGYYSHTFYDYWGQGL 120
Qy 117 VTSS 121
Db 121 VTSS 125

RESULT 2

S31686
Ig heavy chain V region - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 22-Nov-1993 #sequence_revision 10-Nov-1995 #text_change 23-Jul-1999
C;Accession: S31686
R;Cuisinier, A.M.; Gauthier, L.; Boublil, L.; Fougereau, M.; Tonnelles, C.
submitted to the EMBL Data Library, June 1992
A;Description: Mechanisms that generate human immunoglobulin diversity operate from the
A;Reference number: S31585
A;Accession: S31686
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-140 <CUI>
A;Cross-references: UNIPARC:UPI0000116477; EMBL:Z14205; NID:G30969; PIDN:CAA78574.1; PID:
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: heterotetramer; immunoglobulin


```
Best Local Similarity 71.9%; Pred. No. 1.3e-35;
Matches 87; Conservative 7; Mismatches 27; Indels 0; Gaps 0;

QY 1 EVLVESGGGLVQPGGSLRLSCAASGYSTFGTHMNNVWVRQAPGKLEWVGMIAPASSSTRY 60
    |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 1 EVLVESGGGLVQPGGSLRLSCAASGYSTFGTHMNNVWVRQAPGKLEWVGMIAPASSSTRY 60
    |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 61 NQPKDRFTISVDKSKNTLYLQMNLSRAEDTAVVYCARGIYFYGTTFDYWGQGLTVTVS 120
    |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 61 ADSVKGRFTISRDNKNTLYLQMNLSRAEDTAVVYCVRAIGRYSGYLDYWGQGLTVTVS 120
    |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 121 $ 121
Db 121 $ 121

RESULT 7
Ig heavy chain - human
C/Species: Homo sapiens (man)
C/Date: 02-Dec-1993 #sequence_revision 26-May-1995 #text_change 17-Mar-1999
C/Accession: S31107
R/Raaphorst, F.M.; Timmers, E.; Kenter, M.J.H.; van Tol, M.J.D.; Vossen, J.M.; Schuurman
Eur. J. Immunol. 22, 247-251, 1992
A/Title: Restricted utilization of germ-line V(H)3 genes and short diverse third comple
A/Reference number: S31104; MUID:92111633; PMID:1730252
A/Accession: S31107
A/Status: preliminary; nucleic acid sequence not shown; translation not shown
A/Molecule type: mRNA
A/Residues: 1-119 <PAA>
A/Cross-references: UNIPARC:UPI0000176DC7; EMBL:X62955
A/Note: the nucleotide sequence was submitted to the EMBL Data Library, October 1991
C/Superfamily: immunoglobulin V region; immunoglobulin homology
C/Keywords: heterotetramer; immunoglobulin
F:15-98/Domain: immunoglobulin homology <IMM>

Query Match 70.1%; Score 455; DB 2; Length 119;
Best Local Similarity 74.0%; Pred. No. 1.9e-35;
Matches 91; Conservative 9; Mismatches 17; Indels 6; Gaps 2;

QY 1 EVLVESGGGLVQPGGSLRLSCAASGYSTFGTHMNNVWVRQAPGKLEWVGMIAPASSSTRY 60
    |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 1 EVLVESGGGLVQPGGSLRLSCAASGYSTFGTHMNNVWVRQAPGKLEWVGMIAPASSSTRY 60
    |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 61 NQPKDRFTISVDKSKNTLYLQMNLSRAEDTAVVYCAR--GIYFYGTTFDYWGQGLTVT 118
    |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 61 ADSVKGRFTISRDNKNTLYLQMNLSRAEDTAVVYCAKPGASY----YFDYWGQGLTVT 116
    |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 119 VSS 121
Db 117 VSS 119

RESULT 8
Ig heavy chain - human
C/Species: Homo sapiens (man)
C/Date: 02-Dec-1993 #sequence_revision 26-May-1995 #text_change 17-Mar-1999
C/Accession: S31108
R/Raaphorst, F.M.; Timmers, E.; Kenter, M.J.H.; van Tol, M.J.D.; Vossen, J.M.; Schuurman
Eur. J. Immunol. 22, 247-251, 1992
A/Title: Restricted utilization of germ-line V(H)3 genes and short diverse third comple
A/Reference number: S31104; MUID:92111633; PMID:1730252
A/Accession: S31108
A/Status: preliminary; nucleic acid sequence not shown; translation not shown
A/Molecule type: mRNA
A/Residues: 1-119 <PAA>
A/Cross-references: UNIPARC:UPI0000176DC8; EMBL:X62956
A/Note: the nucleotide sequence was submitted to the EMBL Data Library, October 1991
C/Superfamily: immunoglobulin V region; immunoglobulin homology
C/Keywords: heterotetramer; immunoglobulin
F:15-98/Domain: immunoglobulin homology <IMM>
```

```
Query Match 70.0%; Score 454; DB 2; Length 119;
Best Local Similarity 74.4%; Pred. No. 2.4e-35;
Matches 90; Conservative 9; Mismatches 20; Indels 2; Gaps 1;

QY 1 EVLVESGGGLVQPGGSLRLSCAASGYSTFGTHMNNVWVRQAPGKLEWVGMIAPASSSTRY 60
    |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 1 EVLVESGGGLVQPGGSLRLSCAASGYSTFGTHMNNVWVRQAPGKLEWVGMIAPASSSTRY 60
    |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 61 NQPKDRFTISVDKSKNTLYLQMNLSRAEDTAVVYCARGIYFYGTTFDYWGQGLTVTVS 120
    |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 61 ADSVKGRFTISRDNKNTLYLQMNLSRAEDTAVVYCAKDRRLTGT--YFDYWGQGLTVTVS 118
    |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 121 $ 121
Db 119 $ 119

RESULT 9
Ig heavy chain V region - human
C/Species: Homo sapiens (man)
C/Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 23-Mar-2001
C/Accession: S20782
R/Mortari, F.; Wang, J.; Schroeder, H.W.
submitted to the EMBL Data Library, April 1992
A/Description: Analysis of the IGA and IGH rearranged VH repertoire of human cord blood E
A/Reference number: S20765
A/Accession: S20782
A/Status: preliminary
A/Molecule type: DNA
A/Residues: 1-124 <MOR>
A/Cross-references: UNIPARC:UPI00001163EA; EMBL:Z11946; NID:g33897; PIDN:CAA78003.1; PID:
C/Superfamily: immunoglobulin V region; immunoglobulin homology
C/Keywords: heterotetramer; immunoglobulin
F:15-98/Domain: immunoglobulin homology <IMM>

Query Match 69.7%; Score 452.5; DB 2; Length 124;
Best Local Similarity 72.6%; Pred. No. 3.4e-35;
Matches 90; Conservative 11; Mismatches 20; Indels 3; Gaps 2;

QY 1 EVLVESGGGLVQPGGSLRLSCAASGYSTFGTHMNNVWVRQAPGKLEWVGMIAPASSSTRY 60
    |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 1 EVLVESGGGLVQPGGSLRLSCAASGYSTFGTHMNNVWVRQAPGKLEWVGMIAPASSSTRY 60
    |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 61 NQPKDRFTISVDKSKNTLYLQMNLSRAEDTAVVYCAR--GIYFYGTTFDYWGQGLTVT 117
    |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 61 ADSVKGRFTISRDNKNTLYLQMNLSRAEDTAVVYCAKRIAFGWVPHFDYWGQGLTV 120
    |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 118 TVSS 121
Db 121 TVSS 124

RESULT 10
Ig heavy chain V region - human (fragment)
C/Species: Homo sapiens (man)
C/Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 23-Jul-1999
C/Accession: S23624
R/Olee, T.; Lu, E.W.; Huang, D.P.; Soto-Gil, R.W.; Defcos, M.; Kozin, F.; Carson, D.A.; C
J. Exp. Med. 175, 831-842, 1992
A/Title: Genetic analysis of self-associating immunoglobulin G rheumatoid factors from tv
A/Reference number: S23623; MUID:92156804; PMID:1740665
A/Accession: S23624
A/Status: preliminary
A/Molecule type: DNA
A/Residues: 1-143 <OLE>
A/Cross-references: UNIPARC:UPI0000115F94; EMBL:X59703; NID:g32012; PIDN:CAA42224.1; PID:
C/Superfamily: immunoglobulin V region; immunoglobulin homology
C/Keywords: heterotetramer; immunoglobulin
F:15-98/Domain: immunoglobulin homology <IMM>

Query Match 69.5%; Score 451; DB 2; Length 143;
```

Best Local Similarity	74.4%	Pred. NO. 5.5e-35;
Matches	90;	Conservative
	9;	Mismatches
	18;	Indels
	4;	Gaps
	1	
Qy	1	EVQLVESGGGLVQPGGSLRLS
		CAASGYSTFTGHNNWVQAPCKGL
		EWGIMTAPASSSTRY
	60	
Db	1	EVQLVESGGGLVQPGGSLRLS
		CAASGFTFSYNNWVQAPCKGL
		EWYSISSSTRY
	60	
Qy	61	NQEKDPTTISVDKSKNTLYIQM
		NSLRAEDTAVYVCARGIFYGTYT
		DYWGQGLTVTS
	120	
Db	61	ADSVKGRFTTISRDNAKNSLYQ
		MNSLRAEDTAVYVCARGYRG
		---DYWGQGLTVTS
	116	
Qy	121	S
	121	
Db	117	S
	117	

RESULT 11

S31669

Ig heavy chain V region - human (fragment)

C/Species: Homo sapiens (man)

C/Date: 22-Nov-1993 #sequence_revision 10-Nov-1995 #text_change 23-Jul-1999

C/Accession: S31669

R/Cuisinier, A.M.; Gauthier, L.; Boubli, L.; Fougereau, M.; Tonnelie, C.

A/Submitted to: The EMBL Data Library, June 1992

A/Description: Mechanisms that generate human immunoglobulin diversity operate from the

A/Reference number: S31585

A/Accession: S31669

A/Status: preliminary

A/Molecule type: mRNA

A/Residues: 1-141 <CUI>

A/Cross-references: UNIPARC:UPI000011647C; EMBL:Z14212; PIDN:CAA78581.1; PIDN:CAA78581.1; PIDN:CAA78581.1

C/Superfamily: immunoglobulin V region; immunoglobulin homology

C/Keywords: heterotetramer; immunoglobulin

P/34-117/Domain: immunoglobulin homology <IMW>

	Query Match	69.4%	Score	450.5;	DB 2;	Length	141;		
	Best Local Similarity	73.0%	Pred.	No. 6e-35;					
	MATCHES	89;	Conservative	11;	Mismatches	21;	Indels	1; Gaps	1;
QY		1	EVLVSGGGGLVPQGGSURLSCAASGYSFTCHMNWVRQAPEGKLGLEWGMLAPASSSTRY	60					
Dd		20	EVLVSGGGGLVKPGGSURLSCAAGSPTFSSYSNMNWRQAPEGKLGLEWSSISSSSYTYT	79					
QY		61	NQPKDFTTSVDKSQTLYLQMNSLRADTAIVYCARGIYPFGTT-YFDYWGGGTLLTV	119					
Dd		80	ADVKGFTISRDNAKNSLYLOMNSLRADTAIVYCARGHLTGEGKFEDLMRGTLVT	139					
QY		120	SS 121						
Dd		140	SS 141						

RESULT 12
S26794
IG heavy chain V region - human
C/Species: Homo sapiens (man)
C/Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 17-Mar-1999
C/Accession: S26794
R/Mortari, F.; Newton, J.A.; Wang, J.Y.; Schroeder Jr., H.W.
Eur. J. Immunol. 22, 241-245, 1992
A/Title: The human cord blood antibody repertoire. Frequent usage of the V(H)7 gene family
A/Reference number: S26786; MUID: S211632; PMID: 1730251
A/Accession: S26794
A/Status: Preliminary
A/Molecule type: mRNA
A/Residues: 1-123 <MOR>
A/Cross-references: UNIPAK:UPI0000176C2B; EMBL:X61011
C/Superfamily: immunoglobulin V region; immunoglobulin homology
C/Keywords: heterotrimer; immunoglobulin
F/15-98/Domain: immunoglobulin homology <IMW>

Query Match 69.3%; Score 450; DB 2; Length 123;
Best Local Similarity 71.5%; Pred. No. 5.8e-35;

Matches	88;	Conservative	11;	Mismatches	22;	Indels	2;	Gaps	1
Qy	1	EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHMMNWVRQAPGKGLEWYGMIAPASSTSY	60						
Db	1	EVQLVESGGGLVQPGGSLRLSCAASGFTFSSYNMWVRQAPGKGLEWYISSSSTSY	60						
Qy	61	NQRFKDFTISVDKSKNTLYLQMSLRAEDTAVYYCARGIFYGYTTF--DYWGQGLTVT	118						
Db	61	ADSVKGRFTISRDAKNSLYIQMNSLRDEDTAVYYCARSIKKYDENYYGMDVWGQGLTVT	120						
Qy	119	VSS	121						
Db	121	VSS	123						

```

RESULT 13
S48798
lg heavy chain V region (anti-Sm, VH3/Dxp4/JH4b) - human
C/Species: Homo sapiens (man)
C/Revision: 13-Jan-1995 #sequence_revision
C/Date: 13-Jan-1995 #text_change 23-Jul-1995
C/Accession: S48798
R/Mahmoudi, M.; Edwards, J.; Cairns, E.; Bell, D.
submitted to the EMBL Data Library, October 1994
A/Description: Molecular characterization of natural human anti-Sm autoantibodies
A/Reference number: S48797
A/Accession: S48798
A/Status: Preliminary
A/Molecule type: mRNA
A/Residues: 1-120 <NAH>
A/Cross-references: UNIPARC:UPI0000116701; EMBL:Z46382; NID:G562324; PIDN:C000000000
C/Superfamily: immunoglobulin V region; immunoglobulin homology
C/Keywords: heterotrimer; immunoglobulin
F/15-98/Domain: immunoglobulin homology <IMM>

```

[illegible]

```

RESULT 14
S19666
IG heavy chain V region (VH3DJH4) - human
S19666
C/Species: Homo sapiens (man)
C/Date: 22-Jan-1993 #sequence_revision 22-Jan-1993 #text_change 20-Jun-2000
C/Accession: S19666
R/Harks, J.D.; Hoogenboom, H.R.; Bonnert, T.P.; McCafferty, J.; Griffiths,
J. Mol. Biol. 222, 581-597, 1991
A/Title: By-passing immunization. Human antibodies from V-gene libraries d
A/Reference number: S19663; MUID:92085276; PMID:1748994
A/Accession: S19666
A/Molecule type: mRNA
A/Residues: 1-121 <MAR>
A/Cross-references: UNIPARC:UPI0000115PE5; EMBL:X61646; NID:G37688; PIDN:CA
C/Superfamily: Immunoglobulin V region; immunoglobulin homology
C/Keywords: heterotetramer; immunoglobulin
F/15-98/Domain: immunoglobulin homology <IMM>

```

Query Match 69.0%; Score 448; DB 2; Length 121;
Best Local Similarity 71.9%; Pred. No. 8.7e-35;
Matches 87; Conservative 12; Mismatches 22; Indels 0; Gaps 0

QY 1 EVQLVESGGGLVQPGGSLRLSCAASGYSPTCHWVNWYRQAPGKLEWVGMIAPASSSTRY 60
 Db 1 QVQLVQSGGGLVQPGGSLRLSCAASGFTFSYGMHWVRQAPGKLEWVAVISYDGSNKYY 60
 QY 61 NQKPKDRFTISVDKSKNTLYLQNSLRAEDTAVVYCARGIFYGTYFDYWGQGLTVTS 120
 Db 61 ADSVKGRFTISRDNKNTLYLQNSLRAEDTAVVYCAKTYSSCGWGYFDYWGQGLTVTS 120
 QY 121 S 121
 Db 121 S 121

RESULT 15

S31587
 Ig heavy chain V region - human
 C:Species: Homo sapiens (man)
 C>Date: 22-Nov-1993 #sequence_revision 10-Nov-1995 #text_change 23-Jul-1999
 C:Accession: S31587
 R:Cuisinier, A.M.; Gauthier, L.; Boublil, L.; Fougereau, M.; Tonnelle, C.
 A:Submitted to the EMBL Data Library, June 1992
 A:Description: Mechanisms that generate human immunoglobulin diversity operate from the
 A:Reference number: S31585
 A:Accession: S31587
 A>Status: preliminary
 A:Molecule type: mRNA
 A:Residues: 1-136 <CUI>
 A:Cross-references: UNIPARC:UPI0000116469; EMBL:Z14189; NID:G31005; PIDN:CAA78558.1; PII
 C:Superfamily: immunoglobulin V region; immunoglobulin homology
 C:Keywords: heterotetramer; immunoglobulin
 F:31-114/Domain: immunoglobulin homology <IMM>

Query Match 69.0%; Score 447.5; DB 2; Length 136;
 Best Local Similarity 72.7%; Pred. No. 1.1e-34;
 Matches 88; Conservative 9; Mismatches 23; Indels 1; Gaps 1;
 QY 1 EVQLVESGGGLVQPGGSLRLSCAASGYSPTCHWVNWYRQAPGKLEWVGMIAPASSSTRY 60
 Db 17 EVQLVESGGGLVQPGGSLRLSCAASGFTFSYGMHWVRQAPGKLEWVAVISYDGSNKYY 76
 QY 61 NQKPKDRFTISVDKSKNTLYLQNSLRAEDTAVVYCARGIFYGTYFDYWGQGLTVTS 120
 Db 77 VDSVKGRFTISRDNKNTLYLQNSLRAEDTAVVYCAKTYSSCGWGYFDYWGQGLTVTS 135
 QY 121 S 121
 Db 136 S 136

Search completed: April 13, 2006, 17:19:34
 Job time : 27.8908 secs

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GenCore version 5.1.7
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OM protein - protein search, using sw model

Run on: April 13, 2006, 17:05:54 ; Search time 156.93 Seconds
(without alignments)
543.993 Million cell updates/sec

Title: US-10-727-737-17

Perfect score: 649

Sequence: 1 EVQLVESGGGLVPGGSLRL.....FYGTTYFDYWGQGLTVTVSS 121

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 2166443 seqs, 705528306 residues

Total number of hits satisfying chosen parameters: 2166443

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

UniProt_05.80.*

1: uniprot_sprot.*

2: uniprot_trembl.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB ID	Description
1	442.5	68.2	119	1 HV37 MOUSE	P01807 mus musculus
2	442.5	68.1	493	2 Q6GMX2 HUMAN	Q6GMX2 homo sapien
3	442.5	68.1	597	2 Q96BB9 HUMAN	Q96BB9 homo sapien
4	441.5	68.0	606	2 Q6GMV2 HUMAN	Q6GMV2 homo sapien
5	438.5	67.6	467	2 Q4VEH1 RAT	Q4VEH1 rattus norv
6	437.5	67.4	119	1 HV38 MOUSE	P01808 mus musculus
7	436	67.2	479	2 Q5PQK9 RAT	Q5PQK9 rattus norv
8	435	67.0	470	2 Q6PJA4 HUMAN	Q6PJA4 homo sapien
9	434.5	66.9	469	2 Q569F4 HUMAN	Q569F4 homo sapien
10	434	66.9	478	2 Q6PI81 HUMAN	Q6PI81 homo sapien
11	433.5	66.8	119	1 HV40 MOUSE	P01810 mus musculus
12	433	66.7	121	2 Q9UL71 HUMAN	Q9UL71 homo sapien
13	429	66.1	113	2 Q9UL90 HUMAN	Q9UL90 homo sapien
14	428.5	66.0	118	2 Q9UL91 HUMAN	Q9UL91 homo sapien
15	428	65.9	118	1 HV39 MOUSE	P01809 mus musculus
16	427	65.8	464	2 Q6MZU6 HUMAN	Q6MZU6 homo sapien
17	424.5	65.4	118	2 Q9UL72 HUMAN	Q9UL72 homo sapien
18	424.5	65.4	613	2 Q8WUK1 HUMAN	Q8WUK1 homo sapien
19	422	65.0	131	2 Q9UL88 HUMAN	Q9UL88 homo sapien
20	421.5	64.9	465	2 Q6P6C4 HUMAN	Q6P6C4 homo sapien
21	421.5	64.9	473	2 Q6MZV7 HUMAN	Q6MZV7 homo sapien
22	421	64.9	240	2 Q55ZC9 HUMAN	Q55ZC9 homo sapien
23	420.5	64.8	494	2 Q96K68 HUMAN	Q96K68 homo sapien
24	419.5	64.6	139	1 HV07 MOUSE	P01751 mus musculus
25	419.5	64.6	145	2 Q924Q7 MOUSE	Q924Q7 mus musculus
26	418	64.4	115	1 HV3D HUMAN	P01765 homo sapien
27	418	64.4	117	1 HV41 MOUSE	P01811 mus musculus
28	418	64.4	479	2 Q5BK72 RAT	Q5BK72 rattus norv
29	417.5	64.3	475	2 Q6MZQ6 HUMAN	Q6MZQ6 homo sapien
30	417	64.3	146	2 Q924Q3 MOUSE	Q924Q3 mus musculus
31	417	64.3	472	2 Q6N089 HUMAN	Q6N089 homo sapien

Query Match 68.2% Score 442.5; DB 1; Length 119;

32	416	64.1	116	2 Q9UL93 HUMAN	Q9UL93 homo sapien
33	416	64.1	476	2 Q4V9Z4 MOUSE	Q4V9Z4 mus musculus
34	415	63.9	616	2 Q504M7 MOUSE	Q504M7 mus musculus
35	414	63.8	466	2 Q6N096 HUMAN	Q6N096 homo sapien
36	413.5	63.7	122	1 HV3G HUMAN	P01768 homo sapien
37	412.5	63.6	119	2 Q5F2I8 MOUSE	Q5F2I8 mus musculus
38	412	63.5	146	2 Q924R8 MOUSE	Q924R8 mus musculus
39	411.5	63.4	147	2 Q9Y509 HUMAN	Q9Y509 homo sapien
40	410	63.2	466	2 Q6IN78 HUMAN	Q6IN78 homo sapien
41	409.5	63.1	487	2 Q6ZVX0 HUMAN	Q6ZVX0 homo sapien
42	409.5	63.1	573	2 Q8WU38 HUMAN	Q8WU38 homo sapien
43	408.5	62.9	145	2 Q924B3 MOUSE	Q924B3 mus musculus
44	408	62.9	117	1 HV42 MOUSE	P01812 mus musculus
45	407.5	62.8	483	2 Q6MZX9 HUMAN	Q6MZX9 homo sapien

ALIGNMENTS

RESULT 1

ID	HV37 MOUSE	STANDARD;	PRT;	119 AA.
AC	P01807;			
DT	21-JUL-1986 (Rel. 01, Created)			
DT	21-JUL-1986 (Rel. 01, Last sequence update)			
DT	13-SEP-2005 (Rel. 48, Last annotation update)			
DB	Ig heavy chain V region X44.			
OS	Mus musculus (Mouse).			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;			
OC	Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;			
OC	Muroidea; Muridae; Murinae; Mus.			
OX	NCBI_TaxID=10090;			
RN	[1]			
RP	PROTEIN SEQUENCE.			
RX	MEDLINE=79223895; PubMed=111245;			
RA	Rao D.N., Rudikoff S., Krutzsch H., Potter M.;			
RT	"Structural evidence for independent joining region gene in immunoglobulin heavy chains from anti-galactan myeloma proteins and its potential role in generating diversity in complementarity-determining regions.";			
RT	determining regions.";			
RL	Proc. Natl. Acad. Sci. U.S.A. 76:2890-2894 (1979).			
RN	[2]			
RP	NUCLEOTIDE SEQUENCE OF 1-118.			
RX	MEDLINE=90064531; PubMed=255519;			
RA	Miller A. III, Glasel J.A.;			
RT	"Comparative sequence and immunochemical analyses of murine monoclonal anti-morphine antibodies.";			
RT	J. Mol. Biol. 209:763-778 (1989).			
CC	-I- MISCELLANEOUS: This chain was isolated from an IgA myeloma protein that binds galactan.			
CC	-I- SIMILARITY: Contains 1 Ig-like (immunoglobulin-like) domain.			
CC	This Swiss-Prot entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use as long as its content is in no way modified and this statement is not removed.			
DR	PIR; A02077; AVMSX4.			
DR	HSPF; P01810; 2FBJ.			
DR	SMR; P01807; 1-119.			
DR	Ensembl; ENSMUSG00000003483; Mus musculus.			
DR	InterPro; IPR007110; Ig-like.			
DR	InterPro; IPR003596; Ig_v.			
DR	SMART; SM00406; IGV; 1.			
DR	PROSITE; PS50835; IG_LIKE; 1.			
KW	Direct protein sequencing; Immunoglobulin domain;			
KW	Immunoglobulin V region.			
FT	DOMAIN 1 117 Ig-like.			
FT	NON TER 119 119			
SEQ	SEQUENCE 119 AA; 13246 MW; BC34FC8F31CD41B3 CRC64;			

Best Local Similarity 67.8%, Pred. No. 3e-39;
Matches 82, Conservative 19, Mismatches 17, Indels 3, Gaps 2;
QY 1 EVQLVESGGGLVQPGGSLRLSQAASGYSTFTGHWNWVRQAPGKGLVWGMITAPASSSTRY 60
Db 1 EVKLVEGGGLVQPGGSLRLSQAASGYSTFTGHWNWVRQAPGKGLVWGMITAPASSSTRY 60
QY 61 NQKFKDPTTISVDKSKNTLYLQMSLRADTAATVYTCARGIYFYGTTFDYWGQGTLLVTVS 120
Db 61 TPSLKDFIISRDNAKNTLYLQMSLRADTAATVYTCARGIYFYGTTFDYWGQGTLLVTVS 117
QY 121 S 121
Db 118 A 118

RESULT 2
Q6GMX2 HUMAN
ID Q6GMX2 HUMAN PRELIMINARY; PRT; 493 AA.
AC Q6GMX2;
DT 05-JUL-2004 (TrEMBLrel. 27, Created)
DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE IGHAI protein.
GN Name=IGHAI;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
OC Homo.
OX NCBI_TaxID=9606;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RC TISSUE=Spleen;
RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Haieh F.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Uesdin T.B., Toshiki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Bosak S.A., McGowan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Villalon D.K., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Fahey J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smalhus D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences."
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).
RN [2]
RP NUCLEOTIDE SEQUENCE.
RC TISSUE=Spleen;
RG NIH MGC Project;
RL Submitted (JUN-2004) to the EMBL/GenBank/DBJ databases.
DR EMBL; BC073771; AAH73771.1; -; mRNA.
DR SMR; Q6GMX2; 263-471.
DR InterPro; IPR003599; IG.
DR InterPro; IPR007110; IG-like.
DR InterPro; IPR003597; IG-cl.
DR InterPro; IPR003006; IG_MHC.
DR InterPro; IPR003006; IG_MHC.
DR Pfam; PF07654; C1-set; 2.
DR SMART; SM00409; IG; 4.
DR SMART; SM00407; IGC1; 2.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PS00835; IG_LIKE; 4.
DR PROSITE; PS00290; IG_MHC; UNKNOWN 1.
SQ SEQUENCE 493 AA; 52865 MW; 55B999305B286203 CRC64;

Query Match 68.1%, Score 442; DB 2; Length 493;
Best Local Similarity 71.1%, Pred. No. 1.8e-38;
Matches 86, Conservative 7, Mismatches 28, Indels 0, Gaps 0;
QY 1 EVQLVESGGGLVQPGGSLRLSQAASGYSTFTGHWNWVRQAPGKGLVWGMITAPASSSTRY 60
Db 20 EVQLVESGGGLVQPGGSLRLSQAASGYSTFTGHWNWVRQAPGKGLVWGMITAPASSSTRY 79
QY 61 NQKFKDPTTISVDKSKNTLYLQMSLRADTAATVYTCARGIYFYGTTFDYWGQGTLLVTVS 120
Db 80 ADSVKGRTTISRDNAKNTLYLQMSLRADTAATVYTCARGIYFYGTTFDYWGQGTLLVTVS 139
QY 121 S 121
Db 140 S 140

RESULT 3
Q96BB9 HUMAN
ID Q96BB9 HUMAN PRELIMINARY; PRT; 597 AA.
AC Q96BB9;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE IGHM protein.
GN Name=IGHM;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
OC Homo.
OX NCBI_TaxID=9606;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RC TISSUE=Primary B-Cells;
RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Haieh F.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Uesdin T.B., Toshiki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Bosak S.A., McGowan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Villalon D.K., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Fahey J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smalhus D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences."
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).
RN [2]
RP NUCLEOTIDE SEQUENCE.
RC TISSUE=Primary B-Cells;
RG NIH MGC Project;
RL Submitted (OCT-2001) to the EMBL/GenBank/DBJ databases.
RN [3]
RP NUCLEOTIDE SEQUENCE.
RX PubMed=2500644;
RA Kishimoto T., Okajima H., Okumoto T., Taniguchi M.;
RT "Nucleotide sequences of the cDNAs encoding the V-regions of H- and L-
RT chains of a human monoclonal antibody with broad reactivity to
RT malignant tumor cells."
RL Nucleic Acids Res. 17:4385-0 (1989).
DR EMBL; BC015760; AAH15760.1; -; mRNA.
DR PIR; S05271; S05271.
DR PIR; S24260; S24260.
DR HSPP; P01861; 1ADQ.

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DR Ensembl; ENSG00000130076; Homo sapiens.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003597; Ig cl.
DR InterPro; IPR003006; Ig MHC.
DR Pfam; PF07654; C1-set; 4.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PS0835; IG_LIKE; 5.
DR PROSITE; PS00290; IG_MHC; UNKNOWN_3.
FW Immunoglobulin domain.
SQ SEQUENCE 597 AA; 65039 MW; 4FCA3AD8BCE263D9 CRC64;

Query Match 68.1%; Score 442; DB 2; Length 597;
Best Local Similarity 72.8%; Pred. No. 2.2e-38;
Matches 91; Conservative 8; Mismatches 22; Indels 4; Gaps 2;

QY 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHMMWVRAQPKGLEWGMIAPIASSSTRY 60
   |||||
DB 20 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHMMWVRAQPKGLEWGMIAPIASSSTRY 79
   |||||

QY 61 NQKPKDRPTISVDKSKNTLYLQMSLRAEDTAVYCA---RGIYFYGT-TYFDYWGQGL 116
   |||||
DB 80 ADSVKGRFTISRDNKSLRLYLQMSLRAEDTAVYCAKDPGSGASGNYTREDYWGQGL 139
   |||||

QY 117 VTSS 121
DB 140 VTSS 144

RESULT 4
Q6GMV2_HUMAN
ID Q6GMV2_HUMAN PRELIMINARY; PRT; 606 AA.
AC Q6GMV2;
DT 05-JUL-2004 (TREMBLrel. 27, Created)
DT 05-JUL-2004 (TREMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBLrel. 27, Last annotation update)
DE IGHM protein.
GN Name=IGHM;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
OC Homo.
OX NCBI_TaxID=9606;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RC TISSUE=Primary B-Cells;
RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Klausner R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Villalón D.K., Muzny K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Richards S., Worley K.C., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Fahy J., Helton E., Kettman M., Madan A., Rodrigues S., Sanchez A.,
RA Whiting M., Touchman J.W., Green E.D., Dickson M.C.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grinwood J., Schmutz J., Myers R.M.,
RA Buterfield Y.S.N., Krzywinski M.I., Skalska U., Smalhus D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences."
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).
RN [2]
RP NUCLEOTIDE SEQUENCE.
RC TISSUE=Primary B-Cells;
RG NIH MGC Project;
DR Submitted (JUN-2004) to the EMBL/GenBank/DBJ databases.
DR EMBL; BC073758; AAH73758.1; -, mRNA.

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DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003597; Ig_c1.
DR InterPro; IPR003006; Ig_MHC.
DR InterPro; IPR003596; Ig_v.
DR Pfam; PF07654; C1-set; 3.
DR SMART; SM00409; IG; 2.
DR SMART; SM00407; IGc1; 3.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PSS00835; IG_LIKE; 4.
DR PROSITE; PSS00290; IG_MHC; UNKNOWN 2.
SQ SEQUENCE 470 AA; 51716 MW; 7B49556A11FD7D99 CRC64;

Query Match 67.0%; Score 435; DB 2; Length 470;
Best Local Similarity 70.2%; Pred. No. 9.5e-38;
Matches 85; Conservative 9; Mismatches 27; Indels 0; Gaps 0

QY 1 EVQLVDSGGGLVPGGSLRLSCAASGYSTFTGHMNWVRQAPKGLEWGMIAPIASSTRY 60
DB 20 EVQLVDSGGGLVPGGSLRLSCVVGTFSSYMSWVRQAPKGLEWVANIQDGSKEY 79
QY 61 NQPKFKRFTISVDKSKNTLYLQNMNLSRAEDTAVYYCARGIYFYGTGYFDYWGQGLTVTVS 120
DB 80 VDSYKGRFTISRDNWAKNSLYLQNMNLSRAEDTAVYYCARDGSSWYRDFDPWGQGLTVTVS 139
QY 121 S 121
DB 140 S 140

RESULT 9
Q569F4 HUMAN
ID Q569F4 HUMAN PRELIMINARY; PRT; 469 AA.
AC Q569F4;
DT 10-MAY-2005 (TrEMBLrel. 30, Created)
DT 10-MAY-2005 (TrEMBLrel. 30, Last sequence update)
DT 10-MAY-2005 (TrEMBLrel. 30, Last annotation update)
DE IGHG1 protein.
GN IGHG1
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
OC Homo
OC HOMO
OX NCBI_TaxID=9606;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RS TISSUE=Lymph;
RX MEDLINE=223388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G., Klausner R.D., Collins F.S., Wagner L.H., Shenmen C.M., Schuler G.D., Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K., Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J.J., Hsieh F., Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Stapleton M., Soares M.B., Bonaldo M.P., Casavant T.L., Scheetz T.E., Brownstein M.J., Udén T.B., Toshiyuki S., Carninci P., Prange C., Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullany S.J., Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H., Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W., Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Fahy J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A., Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.N., Krzyzinski M.I., Skalska U., Smailus D.E., Schnurch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences."
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).
RN [2]
RP NUCLEOTIDE SEQUENCE.
RS TISSUE=Lymph;
RX NTH WGC Project;
RL Submitted (APR-2005) to the EMBL/GenBank/DBJ databases.
DR EMBL; BC092518.1; -; mRNA.

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DR PROSITE; PSS0835; IG_LIKE; 4.
DR PROSITE; PSS0290; IG_MHC; UNKNOWN 2.
DR PROSITE; 478 AA; 52667 MW; 17BED38D917970D6 CRC64;
SQ
Query Match 66.9%; Score 434; DB 2; Length 478;
Best Local Similarity 66.4%; Pred. NO. 1.2e-37;
Matches 8; Conservative 9; Mismatches 23; Indels 12; Gaps 2;
Qy 1 EVLVESGGGLVPGGSLRLSLSAASGYSTGHWMNVVRQAPGKGLWVGWGIAPASSSTRY 60
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
20 EVLVESGGGLVPGGSLRLSLSAASGFTSSYWMVVRQAPGKGLWVGWGIAPASSSTRY 79
Qy 61 NQPKDRPTISVDKSKNTLYLQWNSLRAREDATVYVCARGI-----YFVGTTYFDY 110
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
80 VDSVKGRFTISRDNAKNSLYLQWNSLRAREDATVYVCAREFESTMTVTNADYYY--FYMDV 137
Qy 111 WGGGTGLVTVSS 121
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
138 WGGGTGLVTVSS 148
RESULT 11
HV40_MOUSE
ID HV40_MOUSE STANDARD; PRT; 119 AA.
AC P01810;
DT 21-JUL-1986 (Rel. 01, Created)
DT 21-JUL-1986 (Rel. 01, Last sequence update)
DT 10-MAY-2005 (Rel. 47, Last annotation update)
DE Ig heavy chain V region J539.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
OC Muridea; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP PRELIMINARY PROTEIN SEQUENCE.
RX MEDLINE=79223895; PubMed=11245;
RA Rao D.N., Rudikoff S., Krutzsch H., Potter M.;
RT "Structural evidence for independent joining region gene in
RT immunoglobulin heavy chains from anti-galactan myeloma proteins and
RT its potential role in generating diversity in complementarity-
RT determining regions.";
RL Proc. Natl. Acad. Sci. U.S.A. 76:2890-2894(1979).
RN [2]
RP X-RAY CRYSTALLOGRAPHY (2.6 ANGSTROMS).
RX MEDLINE=88217852; PubMed=3449853; DOI=10.1002/prot.340010112;
RA Suh S.W., Bhat T.N., Navia M.A., Cohen G.H., Rao D.N., Rudikoff S.,
RA Davies D.R.;
RT "The galactan-binding immunoglobulin Fab J539: an X-ray diffraction
RT study at 2.6-A resolution.";
RL Proteins 1:74-80(1986).
CC -I- MISCELLANEOUS: This chain was isolated from a myeloma protein that
CC binds galactan.
CC -----
CC This Swiss-Prot entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use as long as its content is in no way modified and this statement is not
CC removed.
CC -----
CC PIR; A02080; AVMSJ5.
CC PDB; 2FSJ; X-ray; H=1-119.
CC SMR; P01810; 1-119.
CC Ensembl; ENSMUSG0000003483; Mus musculus.
CC InterPro; IPR007110; IG-like.
CC InterPro; IPR003586; IG_v.
CC SMART; SM00406; IGV; 1.
CC PROSITE; PSS0835; IG_LIKE; 1.
KW 3D-structure; Direct protein sequencing; Immunoglobulin domain;
FT NON TER 119 119
FT STRAND 3 7
FT STRAND 10 12

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FT TURN 14 15
FT STRAND 18 25
FT HELIX 29 31
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FT TURN 41 42
FT STRAND 45 51
FT TURN 53 54
FT STRAND 58 60
FT TURN 62 67
FT STRAND 68 72
FT STRAND 78 83
FT HELIX 88 90
FT STRAND 92 100
FT TURN 101 103
FT STRAND 104 108
FT STRAND 112 116
SQ SEQUENCE 119 AA; 13240 MW; 577B4F1DB675C1F1 CRC64;

Query Match 66.8%; Score 433.5; DB 1; Length 119;
Best Local Similarity 66.1%; Pred. No. 2.8e-38;
Matches 80; Conservative 20; Mismatches 18; Indels 3; Gaps 2;

CY 1 EVQLVESGGGLVQPQGGSLRLSCAASGYSFTGHMNMWVRQAPGKGLIEWGMIAPASSTRY 60
DB 1 EVKLESGGGLVQPQGGSLRLSCAASGDPFSKYMSWVRQAPGKGLIEWGIEHPDGGTINY 60

CY 61 NQKFKDRFTISVDKSKNTLYLQMSLRAEDTAVYVCARGIYFTYDYWGQGLTVTS 120
DB 61 TPCLKDKFTISRDNKNSLYLQMSKVRSEDTALYYCAR-LHYYG--YNAYWGQGLTVTS 117

CY 121 S 121
DB 118 A 118

RESULT 12
Q9UL71_HUMAN
ID Q9UL71_HUMAN PRELIMINARY; PRT; 121 AA.
AC Q9UL71;
DT 01-MAY-2000 (TremBLrel. 13, Created)
DT 01-MAY-2000 (TremBLrel. 13, Last sequence update)
DT 01-OCT-2003 (TremBLrel. 25, Last annotation update)
DE Myosin-reactive immunoglobulin heavy chain variable region
DE (Fragment).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
OC Homo.
OX NCBI_TaxID=9606;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RX MEDLINE=98277139; PubMed=9614934; DOI=10.1006/clin.1998.4531;
RA Wu X., Liu B., Van der Merwe P.L., Kalis N.N., Berney S.M.,
RA Young D.C.;
RT "Myosin-reactive autoantibodies in rheumatic carditis and normal
RT fetus.";
RL Clin. Immunol. 87:184-192 (1998).
RN [2]
RP NUCLEOTIDE SEQUENCE.
RX PubMed=1730252;
RA Raaphorst F.M., Timmers E., Kenter M.J., Van Tol M.J., Vossen J.M.,
RA Schuurman R.K.;
RT "Restricted utilization of germ-line VH3 genes and short diverse third
RT complementarity-determining regions (CDR3) in human fetal B lymphocyte
RT immunoglobulin heavy chain rearrangements.";
RL Eur. J. Immunol. 22:247-251 (1992).
DR EMBL; AF035044; AAD56260.1; -; mRNA.
DR PIR; S78486; S78486.
DR HSSP; P01772; 2PB4.
DR SMR; Q9UL90; 1-113.
DR InterPro; IPR007110; Ig-like.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PS50835; IG_LIKE; 1.
FT NON_TER 1
FT NON_TER 113 113
SQ SEQUENCE 113 AA; 12437 MW; ED57FDD19086D07F CRC64;

Query Match 66.1%; Score 429; DB 2; Length 113;
Best Local Similarity 70.2%; Pred. NO. 8e-38;
Matches 85; Conservative 10; Mismatches 18; Indels 8; Gaps 1;

CY 1 EVQLVESGGGLVQPQGGSLRLSCAASGYSFTGHMNMWVRQAPGKGLIEWGMIAPASSTRY 60
DB 1 EVQLVESGGGVVQPQGGSLRLSCAASGFTFSSYGMHWVRQAPGKGLIEWAFIRYDGSNKTY 60

CY 61 NQKFKDRFTISVDKSKNTLYLQMSLRAEDTAVYVCARGIYFTYDYWGQGLTVTS 120
DB 61 ADSVKGRTISRDNKNSLYLQMSLRAEDTAVYVCARDL-----NYWGQGLTVTS 112

CY 121 S 121
DB 113 S 113

Query Match 66.7%; Score 433; DB 2; Length 121;
Best Local Similarity 69.6%; Pred. No. 3.2e-38;
Matches 87; Conservative 11; Mismatches 19; Indels 8; Gaps 2;

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CY 1 EVQLVESGGGLVQPQGGSLRLSCAASGYSFTGHMNMWVRQAPGKGLIEWGMIAPASSTRY 60
DB 1 EVQLVESGGGVVQPQGGSLRLFCALAGFTFDGYAMHWVRQAPGKGLIEWSLISGDCGSTYY 60

CY 61 NQKFKDRFTISVDKSKNTLYLQMSLRAEDTAVYVCARGIYFTYDYWGQGLTVTS 116
DB 61 ADSVKGRTISRDNKNSLYLQMSLRAEDTALYYCARGKVTIY----DRPDIWGQGTIM 116

CY 117 VTSS 121
DB 117 VTSS 121

RESULT 13
Q9UL90_HUMAN
ID Q9UL90_HUMAN PRELIMINARY; PRT; 113 AA.
AC Q9UL90;
DT 01-MAY-2000 (TremBLrel. 13, Created)
DT 01-MAY-2000 (TremBLrel. 13, Last sequence update)
DT 01-MAR-2004 (TremBLrel. 26, Last annotation update)
DE Myosin-reactive immunoglobulin heavy chain variable region
DE (Fragment).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
OC Homo.
OX NCBI_TaxID=9606;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RX MEDLINE=98277139; PubMed=9614934; DOI=10.1006/clin.1998.4531;
RA Wu X., Liu B., Van der Merwe P.L., Kalis N.N., Berney S.M.,
RA Young D.C.;
RT "Myosin-reactive autoantibodies in rheumatic carditis and normal
RT fetus.";
RL Clin. Immunol. 87:184-192 (1998).
RN [2]
RP NUCLEOTIDE SEQUENCE.
RX PubMed=1730252;
RA Raaphorst F.M., Timmers E., Kenter M.J., Van Tol M.J., Vossen J.M.,
RA Schuurman R.K.;
RT "Restricted utilization of germ-line VH3 genes and short diverse third
RT complementarity-determining regions (CDR3) in human fetal B lymphocyte
RT immunoglobulin heavy chain rearrangements.";
RL Eur. J. Immunol. 22:247-251 (1992).
DR EMBL; AF035044; AAD56260.1; -; mRNA.
DR PIR; S78486; S78486.
DR HSSP; P01772; 2PB4.
DR SMR; Q9UL90; 1-113.
DR InterPro; IPR007110; Ig-like.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PS50835; IG_LIKE; 1.
FT NON_TER 1
FT NON_TER 113 113
SQ SEQUENCE 113 AA; 12437 MW; ED57FDD19086D07F CRC64;

Query Match 66.1%; Score 429; DB 2; Length 113;
Best Local Similarity 70.2%; Pred. NO. 8e-38;
Matches 85; Conservative 10; Mismatches 18; Indels 8; Gaps 1;

CY 1 EVQLVESGGGLVQPQGGSLRLSCAASGYSFTGHMNMWVRQAPGKGLIEWGMIAPASSTRY 60
DB 1 EVQLVESGGGVVQPQGGSLRLSCAASGFTFSSYGMHWVRQAPGKGLIEWAFIRYDGSNKTY 60

CY 61 NQKFKDRFTISVDKSKNTLYLQMSLRAEDTAVYVCARGIYFTYDYWGQGLTVTS 120
DB 61 ADSVKGRTISRDNKNSLYLQMSLRAEDTAVYVCARDL-----NYWGQGLTVTS 112

CY 121 S 121
DB 113 S 113

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Result No.	Score	Query #		DB	ID	Description
		Match	Length			
1	649	100.0	121	3	US-09-795-798-24	Sequence 24, Appl
2	649	100.0	121	4	US-10-727-737-17	Sequence 17, Appl
3	632	97.4	121	3	US-09-795-798-5	Sequence 5, Appl
4	632	97.4	121	4	US-10-727-737-5	Sequence 5, Appl
5	632	97.4	121	5	US-10-877-538-6	Sequence 6, Appl
6	632	97.4	451	4	US-10-423-299-4	Sequence 4, Appl
7	548.5	84.5	116	3	US-09-726-258-50	Sequence 50, Appl
8	520.5	80.2	122	5	US-10-835-641-20	Sequence 20, Appl
9	517.5	79.7	452	5	US-10-861-049-46	Sequence 46, Appl
10	517.5	79.7	452	6	US-11-021-874-46	Sequence 2, Appl
11	516.5	79.6	122	4	US-10-818-765-2	Sequence 2, Appl
12	516.5	79.6	122	5	US-10-877-363-2	Sequence 2, Appl
13	516.5	79.6	122	5	US-10-822-651-2	Sequence 2, Appl
14	516.5	79.6	122	5	US-10-861-049-14	Sequence 14, Appl
15	516.5	79.6	122	6	US-11-021-874-14	Sequence 14, Appl
16	516.5	79.6	122	6	US-11-005-677-2	Sequence 2, Appl
17	516.5	79.6	122	6	US-11-006-136-2	Sequence 2, Appl
18	516.5	79.6	452	4	US-10-818-765-4	Sequence 4, Appl
19	516.5	79.6	452	5	US-10-861-049-16	Sequence 16, Appl
20	516.5	79.6	452	5	US-10-861-049-17	Sequence 17, Appl
21	516.5	79.6	452	5	US-10-861-049-20	Sequence 20, Appl
22	516.5	79.6	452	5	US-10-861-049-22	Sequence 22, Appl
23	516.5	79.6	452	6	US-11-021-874-16	Sequence 16, Appl
24	516.5	79.6	452	6	US-11-021-874-17	Sequence 17, Appl
25	516.5	79.6	452	6	US-11-021-874-20	Sequence 20, Appl
26	516.5	79.6	452	6	US-11-021-874-22	Sequence 22, Appl
27	516.5	79.6	452	6	US-11-005-677-4	Sequence 4, Appl

Qy 61 NQKFKDRFTTISVDKSKNTLYLQMSLRAEDTAVVYCARGIFYGTTTDFYWGQGLTVTS 120
 Db 61 NQKFKDRFTTISVDKSKNTLYLQMSLRAEDTAVVYCARGIFYGTTTDFYWGQGLTVTS 120

Qy 121 \$ 121
 Db 121 \$ 121

RESULT 2

US-10-727-737-17
 ; Sequence 17, Application US/10727737
 ; Publication No. US20040146507A1

GENERAL INFORMATION:

APPLICANT: Presta, Leonard G.
 ; Jardieu, Paula M.
 ; TITLE OF INVENTION: Antibody Mutants
 ; NUMBER OF SEQUENCES: 79
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Genentech, Inc.
 ; STREET: 1 DNA Way
 ; CITY: South San Francisco
 ; STATE: California
 ; COUNTRY: USA
 ; ZIP: 94080

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: WinPatIn (Genentech)
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/10/727,737
 ; FILING DATE: 03-Dec-2003
 ; CLASSIFICATION: <Unknown>
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/975,329B
 ; FILING DATE: 20-Nov-1997
 ; APPLICATION NUMBER: 60/031945
 ; FILING DATE: 27-NOV-1996
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Lee, Wendy M.
 ; REGISTRATION NUMBER: 40,378
 ; REFERENCE/DOCKET NUMBER: P1064R1
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 650/225-1994
 ; TELEFAX: 650/952-9881

INFORMATION FOR SEQ ID NO: 17:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 121 amino acids
 ; TYPE: Amino Acid
 ; TOPOLOGY: Linear

SEQUENCE DESCRIPTION: SEQ ID NO: 17:

US-10-727-737-17
 Query Match 100.0%; Score 649; DB 4; Length 121;
 Best Local Similarity 100.0%; Pred. No. 7.8e-52;
 Matches 121; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKGLWVGMIAPASSSTRY 60
 Db 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKGLWVGMIAPASSSTRY 60

Qy 61 NQKFKDRFTTISVDKSKNTLYLQMSLRAEDTAVVYCARGIFYGTTTDFYWGQGLTVTS 120
 Db 61 NQKFKDRFTTISVDKSKNTLYLQMSLRAEDTAVVYCARGIFYGTTTDFYWGQGLTVTS 120

Qy 121 \$ 121
 Db 121 \$ 121

RESULT 3

US-09-795-798-5

; Sequence 5, Application US/09795798
 ; Publication No. US20030207336A1

GENERAL INFORMATION:

APPLICANT: Presta, Leonard G.
 ; Jardieu, Paula M.
 ; TITLE OF INVENTION: Humanized Anti-CD11a Antibodies
 ; NUMBER OF SEQUENCES: 24
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Genentech, Inc.
 ; STREET: 1 DNA Way
 ; CITY: South San Francisco
 ; STATE: California
 ; COUNTRY: USA
 ; ZIP: 94080

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: WinPatIn (Genentech)
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/795,798
 ; FILING DATE: 28-Feb-2001
 ; CLASSIFICATION: <Unknown>
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: 08/974,899
 ; FILING DATE: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: Lee, Wendy M.
 ; REGISTRATION NUMBER: 40,378
 ; REFERENCE/DOCKET NUMBER: P1014R1
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 650/225-1994
 ; TELEFAX: 650/952-9881

INFORMATION FOR SEQ ID NO: 5:

SEQUENCE CHARACTERISTICS:
 ; LENGTH: 121 amino acids
 ; TYPE: Amino Acid
 ; TOPOLOGY: Linear
 ; SEQUENCE DESCRIPTION: SEQ ID NO: 5:
 ; US-09-795-798-5

Query Match 97.4%; Score 632; DB 3; Length 121;
 Best Local Similarity 96.7%; Pred. No. 2.8e-50;
 Matches 117; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

Qy 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKGLWVGMIAPASSSTRY 60
 Db 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNWVRQAPGKGLWVGMIHPSDSETRY 60

Qy 61 NQKFKDRFTTISVDKSKNTLYLQMSLRAEDTAVVYCARGIFYGTTTDFYWGQGLTVTS 120
 Db 61 NQKFKDRFTTISVDKSKNTLYLQMSLRAEDTAVVYCARGIFYGTTTDFYWGQGLTVTS 120

Qy 121 \$ 121
 Db 121 \$ 121

RESULT 4

US-10-727-737-5
 ; Sequence 5, Application US/10727737
 ; Publication No. US20040146507A1

GENERAL INFORMATION:

APPLICANT: Presta, Leonard G.
 ; Jardieu, Paula M.
 ; TITLE OF INVENTION: Antibody Mutants
 ; NUMBER OF SEQUENCES: 79
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Genentech, Inc.
 ; STREET: 1 DNA Way
 ; CITY: South San Francisco
 ; STATE: California

RESULT 7
US-09-726-258-50
; Sequence 50, Application US/09726258
; Publication No. US20030021790A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc., Hsei, Vanessa
; APPLICANT: Koumenis, Iphigenia
; APPLICANT: Leong, Steven R.
; APPLICANT: Presta, Leonard G.
; APPLICANT: Shahrokh, Zahra
; APPLICANT: Zapata, Gerardo A.
; TITLE OF INVENTION: ANTIBODY FRAGMENT-POLYMER CONJUGATES AND
; TITLE OF INVENTION: HUMANIZED ANTI-IL-8 MONOCLONAL ANTIBODIES
; NUMBER OF SEQUENCES: 72
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.

STREET: 1 DNA Way
 CITY: South San Francisco
 STATE: California
 COUNTRY: USA
 ZIP: 94080
 COMPUTER READABLE FORM:
 MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: WinPatIn (Genentech)
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/09/726,258
 FILING DATE:
 CLASSIFICATION:
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 09/234,182
 FILING DATE:
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 60/094003
 FILING DATE: 24-JUL-1998
 ATTORNEY/AGENT INFORMATION:
 NAME: Love, Richard B.
 REGISTRATION NUMBER: 34,659
 REFERENCE/DOCKET NUMBER: P1085R4-1A
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 650/225-5530
 TELEFAX: 650/952-9881
 INFORMATION FOR SEQ ID NO: 50:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 116 amino acids
 TYPE: amino acid
 TOPOLOGY: Linear
 US-09-726-258-50

Query Match 84.5%; Score 548.5; DB 3; Length 116;
 Best Local Similarity 88.8%; Pred. No. 1.2e-42;
 Matches 103; Conservative 2; Mismatches 10; Indels 1; Gaps 1;
 Qy 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNVVRQAPGKGLVWGMIAPIASSSTRY 60
 Db 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNVVRQAPGKGLVWGMIAPIASSSTRY 60
 Qy 61 NQKFKDRFTTISVDKSKNTLYLQMNLSRAEDTAVYYCAARGIYFYGTTFYDYGQGT 115
 Db 61 ADSVKGRFTTISVDKSKNTLYLQMNLSRAEDTAVYYCAARGIYFYGTTFYDYGQGT 116

RESULT 8
 US-10-835-641-20
 Sequence 20, Application US/10835641
 Publication No. US20040236078A1
 GENERAL INFORMATION:
 APPLICANT: Carter, Paul J.
 PRESTA, Leonard G.
 TITLE OF INVENTION: Method for Making Humanized Antibodies
 NUMBER OF SEQUENCES: 26
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Genentech, Inc.
 STREET: 1 DNA Way
 CITY: South San Francisco
 STATE: California
 COUNTRY: USA
 ZIP: 94080
 COMPUTER READABLE FORM:
 MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: WinPatIn (Genentech)
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/10/835,641
 FILING DATE: 30-Apr-2004
 CLASSIFICATION: <Unknown>
 PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/09/705,398
 FILING DATE: 02-Nov-2000
 APPLICATION NUMBER: 08/146206
 FILING DATE: 17-NOV-1993
 APPLICATION NUMBER: 07/715272
 FILING DATE: 14-JUN-1991
 ATTORNEY/AGENT INFORMATION:
 NAME: Lee, Wendy M.
 REGISTRATION NUMBER: 40,378
 REFERENCE/DOCKET NUMBER: P0709P1D2
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 650/225-1994
 TELEFAX: 650/952-9881
 INFORMATION FOR SEQ ID NO: 20:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 122 amino acids
 TYPE: Amino Acid
 TOPOLOGY: Linear
 US-10-835-641-20

Query Match 80.2%; Score 520.5; DB 5; Length 122;
 Best Local Similarity 83.7%; Pred. No. 4.8e-40;
 Matches 103; Conservative 4; Mismatches 13; Indels 3; Gaps 2;
 Qy 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNVVRQAPGKGLVWGMIAPIASSSTRY 60
 Db 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNVVRQAPGKGLVWGMIAPIASSSTRY 60
 Qy 61 NQKFKDRFTTISVDKSKNTLYLQMNLSRAEDTAVYYCAARGIYFYGTTFYDYGQGT 118
 Db 61 NQKFKDRFTTISVDKSKNTLYLQMNLSRAEDTAVYYCAARGIYFYGTTFYDYGQGT 119
 Qy 119 VSS 121
 Db 120 VSS 122

RESULT 9
 US-10-861-049-46
 Sequence 46, Application US/10861049
 Publication No. US20050095243A1
 GENERAL INFORMATION:
 APPLICANT: Andrew Chan
 APPLICANT: Qian Gong
 APPLICANT: Flavius Martin
 TITLE OF INVENTION: COMBINATION THERAPY FOR B CELL DISORDERS
 FILE REFERENCE: P2040R1US
 CURRENT APPLICATION NUMBER: US/10/861,049
 CURRENT FILING DATE: 2004-06-04
 PRIOR APPLICATION NUMBER: US 60/476,531
 PRIOR FILING DATE: 2003-06-06
 PRIOR APPLICATION NUMBER: US 60/476,481
 PRIOR FILING DATE: 2003-06-05
 PRIOR APPLICATION NUMBER: US 60/476,414
 PRIOR FILING DATE: 2003-06-05
 NUMBER OF SEQ ID NOS: 145
 SEQ ID NO 46
 LENGTH: 452
 TYPE: PRT
 ORGANISM: Artificial sequence
 FEATURE:
 OTHER INFORMATION: sequence is synthesized
 US-10-861-049-46

Query Match 79.7%; Score 517.5; DB 5; Length 452;
 Best Local Similarity 82.0%; Pred. No. 3.4e-39;
 Matches 100; Conservative 8; Mismatches 13; Indels 1; Gaps 1;
 Qy 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNVVRQAPGKGLVWGMIAPIASSSTRY 60
 Db 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHWNVVRQAPGKGLVWGMIAPIASSSTRY 60

QY 61 NQKPKDRFTTISVDKSKNTLYLQMNLSRAEDTAVVYCARVYGYGT-TYFDYWGQGLTVTV 119
Db 61 NQKPKGRFTTISVDKSKNTLYLQMNLSRAEDTAVVYCARVYGYGT-TYFDYWGQGLTVTV 120

QY 120 SS 121
Db 121 SS 122

RESULT 10

US-11-021-874-46
; Sequence 46, Application US/11021874
; Publication No. US20050163775A1
; GENERAL INFORMATION:
; APPLICANT: Andrew Chan
; APPLICANT: Qian Gong
; APPLICANT: Flavius Martin
; TITLE OF INVENTION: COMBINATION THERAPY FOR B CELL DISORDERS
; FILE REFERENCE: P2040R1P1
; CURRENT APPLICATION NUMBER: US/11/021,874
; PRIOR FILING DATE: 2004-12-22
; PRIOR APPLICATION NUMBER: US 10/861,049
; PRIOR FILING DATE: 2004-06-04
; PRIOR APPLICATION NUMBER: US 60/476,531
; PRIOR FILING DATE: 2003-06-06
; PRIOR APPLICATION NUMBER: US 60/476,481
; PRIOR FILING DATE: 2003-06-05
; PRIOR APPLICATION NUMBER: US 60/476,414
; PRIOR FILING DATE: 2003-06-05
; NUMBER OF SEQ ID NOS: 165
; SEQ ID NO 46
; LENGTH: 452
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: sequence is synthesized
US-11-021-874-46

Query Match 79.7%; Score 517.5; DB 6; Length 452;
Best Local Similarity 82.0%; Pred. No. 3.4e-39;
Matches 100; Conservative 8; Mismatches 13; Indels 1; Gaps 1;

QY 1 EVQLVESGGGLVQPGGSLRLSCAASGYSPTGHMMNWVRQAPGKGLWVGMIAPASSSTRY 60
Db 1 EVQLVESGGGLVQPGGSLRLSCAASGYSPTGHMMNWVRQAPGKGLWVGMIAPASSSTRY 60

QY 61 NQKPKDRFTTISVDKSKNTLYLQMNLSRAEDTAVVYCARVYGYGT-TYFDYWGQGLTVTV 119
Db 61 NQKPKGRFTTISVDKSKNTLYLQMNLSRAEDTAVVYCARVYGYGT-TYFDYWGQGLTVTV 120

QY 120 SS 121
Db 121 SS 122

RESULT 11

US-10-818-765-2
; Sequence 2, Application US/10818765
; Publication No. US20040202658A1
; GENERAL INFORMATION:
; APPLICANT: Benyunes, Mark C.
; TITLE OF INVENTION: THERAPY OF AUTOIMMUNE DISEASE IN A PATIENT WITH AN
; INADEQUATE RESPONSE TO A TNF- α INHIBITOR
; FILE REFERENCE: P2027R1-US
; CURRENT APPLICATION NUMBER: US/10/818,765
; CURRENT FILING DATE: 2004-04-06
; PRIOR APPLICATION NUMBER: US 60/461,4819
; PRIOR FILING DATE: 2003-04-09
; NUMBER OF SEQ ID NOS: 4
; SEQ ID NO 2
; LENGTH: 122
; TYPE: PRT
; ORGANISM: Artificial sequence

; FEATURE:
; OTHER INFORMATION: humanized sequence
US-10-818-765-2

Query Match 79.6%; Score 516.5; DB 4; Length 122;
Best Local Similarity 82.0%; Pred. No. 1.1e-39;
Matches 100; Conservative 7; Mismatches 14; Indels 1; Gaps 1;

QY 1 EVQLVESGGGLVQPGGSLRLSCAASGYSPTGHMMNWVRQAPGKGLWVGMIAPASSSTRY 60
Db 1 EVQLVESGGGLVQPGGSLRLSCAASGYSPTGHMMNWVRQAPGKGLWVGMIAPASSSTRY 60

QY 61 NQKPKDRFTTISVDKSKNTLYLQMNLSRAEDTAVVYCARVYGYGT-TYFDYWGQGLTVTV 119
Db 61 NQKPKGRFTTISVDKSKNTLYLQMNLSRAEDTAVVYCARVYGYGT-TYFDYWGQGLTVTV 120

QY 120 SS 121
Db 121 SS 122

RESULT 12

US-10-877-363-2
; Sequence 2, Application US/10877363
; Publication No. US20050032130A1
; GENERAL INFORMATION:
; APPLICANT: BERESINI, MAUREEN
; APPLICANT: SONG, AN
; TITLE OF INVENTION: NEUTRALIZING ANTIBODY ASSAY AND USES THEREFOR
; FILE REFERENCE: P2032R1
; CURRENT APPLICATION NUMBER: US/10/877,363
; CURRENT FILING DATE: 2004-06-24
; PRIOR APPLICATION NUMBER: US 60/490,678
; PRIOR FILING DATE: 2003-07-29
; NUMBER OF SEQ ID NOS: 4
; SEQ ID NO 2
; LENGTH: 122
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Sequence is synthesized.
US-10-877-363-2

Query Match 79.6%; Score 516.5; DB 5; Length 122;
Best Local Similarity 82.0%; Pred. No. 1.1e-39;
Matches 100; Conservative 7; Mismatches 14; Indels 1; Gaps 1;

QY 1 EVQLVESGGGLVQPGGSLRLSCAASGYSPTGHMMNWVRQAPGKGLWVGMIAPASSSTRY 60
Db 1 EVQLVESGGGLVQPGGSLRLSCAASGYSPTGHMMNWVRQAPGKGLWVGMIAPASSSTRY 60

QY 61 NQKPKDRFTTISVDKSKNTLYLQMNLSRAEDTAVVYCARVYGYGT-TYFDYWGQGLTVTV 119
Db 61 NQKPKGRFTTISVDKSKNTLYLQMNLSRAEDTAVVYCARVYGYGT-TYFDYWGQGLTVTV 120

QY 120 SS 121
Db 121 SS 122

RESULT 13

US-10-922-651-2
; Sequence 2, Application US/10922651
; Publication No. US20050053602A1
; GENERAL INFORMATION:
; APPLICANT: BRUNETTA, PAUL G.
; TITLE OF INVENTION: Therapy of Ocular Disorders
; FILE REFERENCE: P2029R1
; CURRENT APPLICATION NUMBER: US/10/922,651
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: US 60/498,791
; PRIOR FILING DATE: 2003-08-29
; NUMBER OF SEQ ID NOS: 4

```

; SEQ ID NO 2
; LENGTH: 122
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Sequence is synthesized.
US-10-922-651-2

Query Match          79.6%; Score 516.5; DB 5; Length 122;
Best Local Similarity 82.0%; Pred. No. 1.1e-39;
Matches 100; Conservative 7; Mismatches 14; Indels 1; Gaps 1;

Qy 1 EVQLVESGGGLVQPGGSLRLSCAASGYSTFGTHWMNWRQAPGKLEWVGMIAPASSSTRY 60
Db 1 EVQLVESGGGLVQPGGSLRLSCAASGYSTFTSYNNHWRQAPGKLEWVGAIYPGNGDTSY 60
Qy 61 NQKFKDRTTISVDKSKNTLYLQNNLSRAEDTAVYVCARGIYFYGT-TYFDYWGQGLTVTV 119
Db 61 NQKFKGRFTTISVDKSKNTLYLQNNLSRAEDTAVYVCARVVYSNSYWFYDVGQGLTVTV 120
Qy 120 SS 121
Db 121 SS 122

RESULT 14
US-10-861-049-14
; Sequence 14, Application US/10861049
; Publication No. US20050095243A1
; GENERAL INFORMATION:
; APPLICANT: Andrew Chan
; APPLICANT: Qian Gong
; APPLICANT: Flavius Martin
; TITLE OF INVENTION: COMBINATION THERAPY FOR B CELL DISORDERS
; FILE REFERENCE: P2040RIUS
; CURRENT APPLICATION NUMBER: US/10/861.049
; CURRENT FILING DATE: 2004-06-04
; PRIOR APPLICATION NUMBER: US 60/476,531
; PRIOR FILING DATE: 2003-06-06
; PRIOR APPLICATION NUMBER: US 60/476,481
; PRIOR FILING DATE: 2003-06-05
; PRIOR APPLICATION NUMBER: US 60/476,414
; PRIOR FILING DATE: 2003-06-05
; NUMBER OF SEQ ID NOS: 145
; SEQ ID NO 14
; LENGTH: 122
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: sequence is synthesized
US-10-861-049-14

Query Match          79.6%; Score 516.5; DB 5; Length 122;
Best Local Similarity 82.0%; Pred. No. 1.1e-39;
Matches 100; Conservative 7; Mismatches 14; Indels 1; Gaps 1;

Qy 1 EVQLVESGGGLVQPGGSLRLSCAASGYSTFGTHWMNWRQAPGKLEWVGMIAPASSSTRY 60
Db 1 EVQLVESGGGLVQPGGSLRLSCAASGYSTFTSYNNHWRQAPGKLEWVGAIYPGNGDTSY 60
Qy 61 NQKFKDRTTISVDKSKNTLYLQNNLSRAEDTAVYVCARGIYFYGT-TYFDYWGQGLTVTV 119
Db 61 NQKFKGRFTTISVDKSKNTLYLQNNLSRAEDTAVYVCARVVYSNSYWFYDVGQGLTVTV 120
Qy 120 SS 121
Db 121 SS 122

RESULT 15
US-11-021-874-14
; Sequence 14, Application US/11021874
; Publication No. US20050163775A1

```

```

; GENERAL INFORMATION:
; APPLICANT: Andrew Chan
; APPLICANT: Qian Gong
; APPLICANT: Flavius Martin
; TITLE OF INVENTION: COMBINATION THERAPY FOR B CELL DISORDERS
; FILE REFERENCE: P2040RIPL
; CURRENT APPLICATION NUMBER: US/11/021.874
; CURRENT FILING DATE: 2004-12-22
; PRIOR APPLICATION NUMBER: US 10/861,049
; PRIOR FILING DATE: 2004-06-04
; PRIOR APPLICATION NUMBER: US 60/476,531
; PRIOR FILING DATE: 2003-06-06
; PRIOR APPLICATION NUMBER: US 60/476,481
; PRIOR FILING DATE: 2003-06-05
; PRIOR APPLICATION NUMBER: US 60/476,414
; PRIOR FILING DATE: 2003-06-05
; NUMBER OF SEQ ID NOS: 165
; SEQ ID NO 14
; LENGTH: 122
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: sequence is synthesized
US-11-021-874-14

Query Match          79.6%; Score 516.5; DB 6; Length 122;
Best Local Similarity 82.0%; Pred. No. 1.1e-39;
Matches 100; Conservative 7; Mismatches 14; Indels 1; Gaps 1;

Qy 1 EVQLVESGGGLVQPGGSLRLSCAASGYSTFGTHWMNWRQAPGKLEWVGMIAPASSSTRY 60
Db 1 EVQLVESGGGLVQPGGSLRLSCAASGYTFTSYNNHWRQAPGKLEWVGAIYPGNGDTSY 60
Qy 61 NQKFKDRTTISVDKSKNTLYLQNNLSRAEDTAVYVCARGIYFYGT-TYFDYWGQGLTVTV 119
Db 61 NQKFKGRFTTISVDKSKNTLYLQNNLSRAEDTAVYVCARVVYSNSYWFYDVGQGLTVTV 120
Qy 120 SS 121
Db 121 SS 122

Search completed: April 13, 2006, 17:24:37
Job time : 119.886 secs

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GenCore version 5.1.7
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CM protein - protein search, using sw model

Run on: April 13, 2006, 17:21:05 ; Search time 17.9651 Seconds
(without alignments)
286.178 Million cell updates/sec

Title: US-10-727-737-17

Perfect score: 649

Sequence: 1 EVQLVESGGLVQPGGSLRL.....PYGTTYDYWGQGLTVTVSS 121

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 217505 seqs, 42489236 residues

Total number of hits satisfying chosen parameters: 217505

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA New:
1: /SID85/prodata1/pubpaa/US08_NEW_PUB.pep:
2: /SID85/prodata1/pubpaa/US06_NEW_PUB.pep:
3: /SID85/prodata1/pubpaa/US07_NEW_PUB.pep:
4: /SID85/prodata1/pubpaa/PCT_NEW_PUB.pep:
5: /SID85/prodata1/pubpaa/US09_NEW_PUB.pep:
6: /SID85/prodata1/pubpaa/US10_NEW_PUB.pep:
7: /SID85/prodata1/pubpaa/US11_NEW_PUB.pep:
8: /SID85/prodata1/pubpaa/US60_NEW_PUB.pep:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	649	100.0	121	6	US-10-665-658-24
2	632	97.4	121	6	US-10-665-658-5
3	632	97.4	121	7	US-11-107-028-50
4	632	97.4	121	7	US-11-149-031-2
5	632	97.4	121	7	US-11-208-422-14
6	521.5	80.4	122	7	US-11-120-338-24
7	521.5	80.4	122	7	US-11-143-077-24
8	521.5	80.4	122	7	US-11-143-386-24
9	521.5	80.4	122	7	US-11-187-364-36
10	521.5	80.4	122	7	US-11-208-422-45
11	521.5	80.4	451	7	US-11-120-338-25
12	521.5	80.4	451	7	US-11-143-077-22
13	521.5	80.4	451	7	US-11-143-386-25
14	521.5	80.4	451	7	US-11-187-364-34
15	521.5	80.4	452	7	US-11-120-338-17
16	521.5	80.4	452	7	US-11-107-028-47
17	521.5	80.4	452	7	US-11-106-820-45
18	521.5	80.4	452	7	US-11-143-077-17
19	521.5	80.4	452	7	US-11-143-386-17
20	521.5	80.4	452	7	US-11-208-422-46
21	517.5	79.7	122	7	US-11-208-422-42
22	517.5	79.7	452	7	US-11-107-028-43
23	517.5	79.7	452	7	US-11-107-028-45
24	517.5	79.7	452	7	US-11-107-028-46
25	517.5	79.7	452	7	US-11-106-820-30

26	517.5	79.7	452	7	US-11-208-422-40	Sequence 40, Appl
27	517.5	79.7	452	7	US-11-208-422-43	Sequence 43, Appl
28	517.5	79.7	452	7	US-11-208-422-44	Sequence 44, Appl
29	516.5	79.6	122	7	US-11-120-338-8	Sequence 8, Appl
30	516.5	79.6	122	7	US-11-107-028-30	Sequence 30, Appl
31	516.5	79.6	122	7	US-11-106-820-8	Sequence 8, Appl
32	516.5	79.6	122	7	US-11-143-077-8	Sequence 8, Appl
33	516.5	79.6	122	7	US-11-190-364-8	Sequence 8, Appl
34	516.5	79.6	122	7	US-11-147-780-8	Sequence 8, Appl
35	516.5	79.6	122	7	US-11-143-386-8	Sequence 8, Appl
36	516.5	79.6	122	7	US-11-187-364-8	Sequence 8, Appl
37	516.5	79.6	122	7	US-11-208-422-2	Sequence 2, Appl
38	516.5	79.6	451	7	US-11-120-338-22	Sequence 22, Appl
39	516.5	79.6	451	7	US-11-143-386-22	Sequence 22, Appl
40	516.5	79.6	452	7	US-11-120-338-14	Sequence 14, Appl
41	516.5	79.6	452	7	US-11-120-338-15	Sequence 15, Appl
42	516.5	79.6	452	7	US-11-107-028-32	Sequence 32, Appl
43	516.5	79.6	452	7	US-11-107-028-33	Sequence 33, Appl
44	516.5	79.6	452	7	US-11-106-820-26	Sequence 26, Appl
45	516.5	79.6	452	7	US-11-106-820-28	Sequence 28, Appl

ALIGNMENTS

RESULT 1
US-10-665-658-24
; Sequence 24, Application US/10665658
; Publication No. US20050276801A1
; GENERAL INFORMATION:
; APPLICANT: Jardiou, Paula M.
; Presta, Leonard G.
; TITLE OF INVENTION: Humanized Anti-CD11a Antibodies
; NUMBER OF SEQUENCES: 71
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WinPatIn (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/665,658
; FILING DATE: 19-Sep-2003
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/031971
; FILING DATE: 27-NOV-1996
; APPLICATION NUMBER: 08/974899
; FILING DATE: 20-NOV-1997
; APPLICATION NUMBER: 09/420745
; FILING DATE: 20-OCT-1999
; APPLICATION NUMBER: 09/975798
; FILING DATE: 28-FEB-2001
; ATTORNEY/AGENT INFORMATION:
; NAME: Tan, Lee K.
; REGISTRATION NUMBER: 39,447
; REFERENCE/POCKET NUMBER: P1014R1C1D1C1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-4462
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 121 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 24:
US-10-665-658-24

Query Match 100.0%; Score 649; DB 6; Length 121;
 Best Local Similarity 100.0%; Pred. No. 3e-46;
 Matches 121; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EVQLVESGGGLVQPGGSLRLSQAASGYSFTGHMNNVVRQAPGKLEWVGMIHPDSSSTRY 60
 DB 1 EVQLVESGGGLVQPGGSLRLSQAASGYSFTGHMNNVVRQAPGKLEWVGMIHPDSSSTRY 60

QY 61 NQPKDRFTTISVDKSKNTLYLQMNLSRAEDTAVVYCARGIYFYGTTFDYWGQGLTVTVS 120
 DB 61 NQPKDRFTTISVDKSKNTLYLQMNLSRAEDTAVVYCARGIYFYGTTFDYWGQGLTVTVS 120

QY 121 S 121
 DB 121 S 121

RESULT 2
 US-10-665-658-5
 ; Sequence 5, Application US/10665658
 ; Publication No. US20050276801A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Presta, Leonard G.
 ; TITLE OF INVENTION: Humanized Anti-CD11a Antibodies
 ; NUMBER OF SEQUENCES: 71
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Genentech, Inc.
 ; STREET: 1 DNA Way
 ; CITY: South San Francisco
 ; STATE: California
 ; COUNTRY: USA
 ; ZIP: 94080

COMPUTER READABLE FORM:
 ; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: WinPatIn (Genentech)
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/10/665,658
 ; FILING DATE: 19-Sep-2003
 ; CLASSIFICATION: <Unknown>
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: 60/031971
 ; FILING DATE: 27-NOV-1996
 ; APPLICATION NUMBER: 08/974899
 ; FILING DATE: 20-NOV-1997
 ; APPLICATION NUMBER: 09/420745
 ; FILING DATE: 20-OCT-1999
 ; APPLICATION NUMBER: 09/975798
 ; FILING DATE: 28-FEB-2001
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Tan, Lee K.
 ; REGISTRATION NUMBER: 39,447
 ; REFERENCE/DOCKET NUMBER: P1014R1CID1C1
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 650/225-4462
 ; TELEFAX: 650/952-9881
 ; INFORMATION FOR SEQ ID NO: 5:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 121 amino acids
 ; TYPE: Amino Acid
 ; TOPOLOGY: Linear
 ; SEQUENCE DESCRIPTION: SEQ ID NO: 5:
 US-10-665-658-5

Query Match 97.4%; Score 632; DB 6; Length 121;
 Best Local Similarity 96.7%; Pred. No. 7.3e-45;
 Matches 117; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 1 EVQLVESGGGLVQPGGSLRLSQAASGYSFTGHMNNVVRQAPGKLEWVGMIHPDSSSTRY 60
 DB 1 EVQLVESGGGLVQPGGSLRLSQAASGYSFTGHMNNVVRQAPGKLEWVGMIHPDSSSTRY 60

DB 1 EVQLVESGGGLVQPGGSLRLSQAASGYSFTGHMNNVVRQAPGKLEWVGMIHPDSSSTRY 60
 QY 61 NQPKDRFTTISVDKSKNTLYLQMNLSRAEDTAVVYCARGIYFYGTTFDYWGQGLTVTVS 120
 DB 61 NQPKDRFTTISVDKSKNTLYLQMNLSRAEDTAVVYCARGIYFYGTTFDYWGQGLTVTVS 120

QY 121 S 121
 DB 121 S 121

RESULT 3
 US-11-107-028-50
 ; Sequence 50, Application US/11107028
 ; Publication No. US20050276803A1
 ; GENERAL INFORMATION:
 ; APPLICANT: CHAN, ANDREW C.
 ; APPLICANT: GONG, QIAN
 ; APPLICANT: MARTIN, FLAVIUS
 ; TITLE OF INVENTION: Method for Augmenting B Cell Depletion
 ; FILE REFERENCE: P2112R1
 ; CURRENT APPLICATION NUMBER: US/11/107,028
 ; CURRENT FILING DATE: 2005-04-15
 ; PRIOR APPLICATION NUMBER: US 60/563,263
 ; PRIOR FILING DATE: 2004-04-16
 ; NUMBER OF SEQ ID NOS: 52
 ; SEQ ID NO 50
 ; LENGTH: 121
 ; TYPE: PRT
 ; ORGANISM: Artificial sequence
 ; FEATURE:
 ; OTHER INFORMATION: sequence is synthesized
 US-11-107-028-50

Query Match 97.4%; Score 632; DB 7; Length 121;
 Best Local Similarity 96.7%; Pred. No. 7.3e-45;
 Matches 117; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 1 EVQLVESGGGLVQPGGSLRLSQAASGYSFTGHMNNVVRQAPGKLEWVGMIHPDSSSTRY 60
 DB 1 EVQLVESGGGLVQPGGSLRLSQAASGYSFTGHMNNVVRQAPGKLEWVGMIHPDSSSTRY 60

QY 61 NQPKDRFTTISVDKSKNTLYLQMNLSRAEDTAVVYCARGIYFYGTTFDYWGQGLTVTVS 120
 DB 61 NQPKDRFTTISVDKSKNTLYLQMNLSRAEDTAVVYCARGIYFYGTTFDYWGQGLTVTVS 120

QY 121 S 121
 DB 121 S 121

RESULT 4
 US-11-149-031-2
 ; Sequence 2, Application US/11149031
 ; Publication No. US20060013818A1
 ; GENERAL INFORMATION:
 ; APPLICANT: COFFE, BERNARD S.
 ; TITLE OF INVENTION: Method of Treating Granuloma Annulare or Sarcoid
 ; FILE REFERENCE: P2129R1
 ; CURRENT APPLICATION NUMBER: US/11/149,031
 ; CURRENT FILING DATE: 2005-06-08
 ; PRIOR APPLICATION NUMBER: US 60/578,768
 ; PRIOR FILING DATE: 2004-06-09
 ; PRIOR APPLICATION NUMBER: US 60/579,096
 ; PRIOR FILING DATE: 2004-06-10
 ; NUMBER OF SEQ ID NOS: 4
 ; SEQ ID NO 2
 ; LENGTH: 121
 ; TYPE: PRT
 ; ORGANISM: Artificial sequence
 ; FEATURE:
 ; OTHER INFORMATION: sequence is synthesized
 US-11-149-031-2

```
Query Match          97.4%; Score 632; DB 7; Length 121;
Best Local Similarity 96.7%; Pred. No. 7.3e-45;
Matches 117; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 1 EVQLVESGGGLVQPGGSLRLSCAASGYSPTGHMMNWVRQAPGKLEWVGMIAPASSSTRY 60
DB 1 EVQLVESGGGLVQPGGSLRLSCAASGYSPTGHMMNWVRQAPGKLEWVGMIHPSDSETRY 60

QY 61 NQKPKDRFTISVDKSKNTLYLQMNLSRAEDTAVYYCARGIYFYGTTFDYWGQGLTVTVS 120
DB 61 NQKPKDRFTISVDKSKNTLYLQMNLSRAEDTAVYYCARGIYFYGTTFDYWGQGLTVTVS 120

QY 121 S 121
DB 121 S 121

RESULT 5
US-11-208-422-14
; Sequence 14, Application US/11208422
; Publication No. US20060067930A1
; GENERAL INFORMATION:
; APPLICANT: Adams, Camellia W.
; APPLICANT: Lien, Samantha
; APPLICANT: Lowman, Henry B.
; APPLICANT: Marvin, Jonathan S.
; APPLICANT: Meng, Yu-Ju G.
; TITLE OF INVENTION: POLYPEPTIDE VARIANTS WITH ALTERED EFFECTOR FUNCTION
; CURRENT APPLICATION NUMBER: US/11/208,422
; PRIOR FILING DATE: 2003-08-19
; PRIOR APPLICATION NUMBER: US 60/603,057
; PRIOR FILING DATE: 2004-08-19
; NUMBER OF SEQ ID NOS: 54
; SEQ ID NO 14
; LENGTH: 121
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Sequence is synthesized
US-11-208-422-14

Query Match          97.4%; Score 632; DB 7; Length 121;
Best Local Similarity 96.7%; Pred. No. 7.3e-45;
Matches 117; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 1 EVQLVESGGGLVQPGGSLRLSCAASGYSPTGHMMNWVRQAPGKLEWVGMIAPASSSTRY 60
DB 1 EVQLVESGGGLVQPGGSLRLSCAASGYSPTGHMMNWVRQAPGKLEWVGMIHPSDSETRY 60

QY 61 NQKPKDRFTISVDKSKNTLYLQMNLSRAEDTAVYYCARGIYFYGTTFDYWGQGLTVTVS 120
DB 61 NQKPKDRFTISVDKSKNTLYLQMNLSRAEDTAVYYCARGIYFYGTTFDYWGQGLTVTVS 120

QY 121 S 121
DB 121 S 121

RESULT 6
US-11-120-338-24
; Sequence 24, Application US/11120338
; Publication No. US20050271658A1
; GENERAL INFORMATION:
; APPLICANT: BRUNETTA, PAUL G.
; APPLICANT: GREWAL, IQBAL S.
; APPLICANT: WALICKE, PATRICIA A.
; TITLE OF INVENTION: PREVENTING AUTOIMMUNE DISEASE
; FILE REFERENCE: P2079R2
; CURRENT APPLICATION NUMBER: US/11/120,338
; CURRENT FILING DATE: 2003-05-03
; PRIOR APPLICATION NUMBER: US 60/568,460
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; PRIOR FILING DATE: 2004-05-05
; NUMBER OF SEQ ID NOS: 25
; SEQ ID NO 24
; LENGTH: 122
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: sequence is synthesized
US-11-120-338-24

Query Match          80.4%; Score 521.5; DB 7; Length 122;
Best Local Similarity 82.8%; Pred. No. 6.8e-36;
Matches 101; Conservative 7; Mismatches 13; Indels 1; Gaps 1;

QY 1 EVQLVESGGGLVQPGGSLRLSCAASGYSPTGHMMNWVRQAPGKLEWVGMIAPASSSTRY 60
DB 1 EVQLVESGGGLVQPGGSLRLSCAASGYSPTGHMMNWVRQAPGKLEWVGAIYFGNGATSY 60

QY 61 NQKPKDRFTISVDKSKNTLYLQMNLSRAEDTAVYYCARGIYF-YGTTYDYWGQGLTVTV 119
DB 61 NQKPKGRFTISVDKSKNTLYLQMNLSRAEDTAVYYCARVYYSYRYWYFDVWGQGLTVTV 120

QY 120 SS 121
DB 121 SS 122

RESULT 7
US-11-143-077-24
; Sequence 24, Application US/11143077
; Publication No. US20060024295A1
; GENERAL INFORMATION:
; APPLICANT: Brunetta, Paul G.
; TITLE OF INVENTION: METHOD FOR TREATING LUPUS
; FILE REFERENCE: P2133R1
; CURRENT APPLICATION NUMBER: US/11/143,077
; CURRENT FILING DATE: 2005-06-02
; PRIOR APPLICATION NUMBER: US 60/577,235
; PRIOR FILING DATE: 2004-06-04
; PRIOR APPLICATION NUMBER: US 60/617,997
; PRIOR FILING DATE: 2004-10-11
; NUMBER OF SEQ ID NOS: 24
; SEQ ID NO 24
; LENGTH: 122
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Sequence is synthesized
US-11-143-077-24

Query Match          80.4%; Score 521.5; DB 7; Length 122;
Best Local Similarity 82.8%; Pred. No. 6.8e-36;
Matches 101; Conservative 7; Mismatches 13; Indels 1; Gaps 1;

QY 1 EVQLVESGGGLVQPGGSLRLSCAASGYSPTGHMMNWVRQAPGKLEWVGMIAPASSSTRY 60
DB 1 EVQLVESGGGLVQPGGSLRLSCAASGYSPTGHMMNWVRQAPGKLEWVGAIYFGNGATSY 60

QY 61 NQKPKDRFTISVDKSKNTLYLQMNLSRAEDTAVYYCARGIYF-YGTTYDYWGQGLTVTV 119
DB 61 NQKPKGRFTISVDKSKNTLYLQMNLSRAEDTAVYYCARVYYSYRYWYFDVWGQGLTVTV 120

QY 120 SS 121
DB 121 SS 122

RESULT 8
US-11-143-386-24
; Sequence 24, Application US/11143386
; Publication No. US20060051345A1
; GENERAL INFORMATION:
; APPLICANT: FROHNA, PAUL A.
```

; TITLE OF INVENTION: METHOD FOR TREATING MULTIPLE SCLEROSIS
; FILE REFERENCE: P2134R1
; CURRENT APPLICATION NUMBER: US/11/143,386
; CURRENT FILING DATE: 2005-06-02
; PRIOR APPLICATION NUMBER: US 60/576,993
; PRIOR FILING DATE: 2004-06-04
; NUMBER OF SEQ ID NOS: 25
; SEQ ID NO 24
; LENGTH: 122
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Sequence is synthesized.
US-11-143-386-24

Query Match 80.4%; Score 521.5; DB 7; Length 122;
Best Local Similarity 82.8%; Pred. No. 6.8e-36;
Matches 101; Conservative 7; Mismatches 13; Indels 1; Gaps 1;

Qy 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHMMNWRQAPGKLEWVGMIAPASSSTRY 60
Db 1 EVQLVESGGGLVQPGGSLRLSCAASGYTFTSYNNHWRQAPGKLEWVGAIYPNGATSY 60

Qy 61 NQPKDRFTTISVDKSKNTLYLQMNLSRAEDTAVVYCARGIYF-YGTTYFDYWGQGLTVTV 119
Db 61 NQPKGRFTTISVDKSKNTLYLQMNLSRAEDTAVVYCARVVIYSRYWYFDYWGQGLTVTV 120

Qy 120 SS 121
Db 121 SS 122

RESULT 9
US-11-187-364-36
; Sequence 36, Application US/11187364
; Publication No. US20060062787A1
; GENERAL INFORMATION:
; APPLICANT: Hitraya, Elena
; TITLE OF INVENTION: METHOD FOR TREATING SJOGREN'S SYNDROME
; CURRENT APPLICATION NUMBER: US/11/187,364
; CURRENT FILING DATE: 2005-07-21
; PRIOR APPLICATION NUMBER: US 60/590,302
; PRIOR FILING DATE: 2004-07-22
; NUMBER OF SEQ ID NOS: 36
; SEQ ID NO 36
; LENGTH: 122
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Sequence is synthesized
US-11-187-364-36

Query Match 80.4%; Score 521.5; DB 7; Length 122;
Best Local Similarity 82.8%; Pred. No. 6.8e-36;
Matches 101; Conservative 7; Mismatches 13; Indels 1; Gaps 1;

Qy 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHMMNWRQAPGKLEWVGMIAPASSSTRY 60
Db 1 EVQLVESGGGLVQPGGSLRLSCAASGYTFTSYNNHWRQAPGKLEWVGAIYPNGATSY 60

Qy 61 NQPKDRFTTISVDKSKNTLYLQMNLSRAEDTAVVYCARGIYF-YGTTYFDYWGQGLTVTV 119
Db 61 NQPKGRFTTISVDKSKNTLYLQMNLSRAEDTAVVYCARVVIYSRYWYFDYWGQGLTVTV 120

Qy 120 SS 121
Db 121 SS 122

RESULT 10
US-11-208-422-45
; Sequence 45, Application US/11208422

; Publication No. US20060067930A1
; GENERAL INFORMATION:
; APPLICANT: Adams, Camellia W.
; APPLICANT: Lien, Samantha
; APPLICANT: Lowman, Henry B.
; APPLICANT: Marvin, Jonathan S.
; APPLICANT: Meng, Yu-Ju G.
; TITLE OF INVENTION: POLYPEPTIDE VARIANTS WITH ALTERED EFFECTOR FUNCTION
; FILE REFERENCE: P2158R1
; CURRENT APPLICATION NUMBER: US/11/208,422
; CURRENT FILING DATE: 2005-08-19
; PRIOR APPLICATION NUMBER: US 60/603,057
; PRIOR FILING DATE: 2004-08-19
; NUMBER OF SEQ ID NOS: 54
; SEQ ID NO 45
; LENGTH: 122
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: sequence is synthesized
US-11-208-422-45

Query Match 80.4%; Score 521.5; DB 7; Length 122;
Best Local Similarity 82.8%; Pred. No. 6.8e-36;
Matches 101; Conservative 7; Mismatches 13; Indels 1; Gaps 1;

Qy 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHMMNWRQAPGKLEWVGMIAPASSSTRY 60
Db 1 EVQLVESGGGLVQPGGSLRLSCAASGYTFTSYNNHWRQAPGKLEWVGAIYPNGATSY 60

Qy 61 NQPKDRFTTISVDKSKNTLYLQMNLSRAEDTAVVYCARGIYF-YGTTYFDYWGQGLTVTV 119
Db 61 NQPKGRFTTISVDKSKNTLYLQMNLSRAEDTAVVYCARVVIYSRYWYFDYWGQGLTVTV 120

Qy 120 SS 121
Db 121 SS 122

RESULT 11
US-11-120-338-25
; Sequence 25, Application US/11120338
; Publication No. US20050271658A1
; GENERAL INFORMATION:
; APPLICANT: BRUNETTA, PAUL G.
; APPLICANT: GREWAL, PATRICIA A.
; APPLICANT: WALICKE, PATRICIA A.
; TITLE OF INVENTION: PREVENTING AUTOIMMUNE DISEASE
; FILE REFERENCE: P2079R2
; CURRENT APPLICATION NUMBER: US/11/120,338
; CURRENT FILING DATE: 2005-05-03
; PRIOR APPLICATION NUMBER: US 60/568,460
; PRIOR FILING DATE: 2004-05-05
; NUMBER OF SEQ ID NOS: 25
; SEQ ID NO 25
; LENGTH: 451
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: sequence is synthesized
US-11-120-338-25

Query Match 80.4%; Score 521.5; DB 7; Length 451;
Best Local Similarity 82.8%; Pred. No. 2e-35;
Matches 101; Conservative 7; Mismatches 13; Indels 1; Gaps 1;

Qy 1 EVQLVESGGGLVQPGGSLRLSCAASGYSFTGHMMNWRQAPGKLEWVGMIAPASSSTRY 60
Db 1 EVQLVESGGGLVQPGGSLRLSCAASGYTFTSYNNHWRQAPGKLEWVGAIYPNGATSY 60

Qy 61 NQPKDRFTTISVDKSKNTLYLQMNLSRAEDTAVVYCARGIYF-YGTTYFDYWGQGLTVTV 119
Db 61 NQPKGRFTTISVDKSKNTLYLQMNLSRAEDTAVVYCARVVIYSRYWYFDYWGQGLTVTV 120

	Best Local Similarity	82.8†; Pred. No. 2e-35;		
	Matches 101; Conservative	7; Mismatches 13; Indels	1; Gaps	1;
Qy	1	EVLVESGGGLVQPGGSLRLSCAASGYSFTGHNNWVRQAAPKGLEWVGMTAPASSSTRY	60	
		: : : : :	:	:
Dd	1	EVLVESGGGLVQPGGSLRLSCAASGYTFTSYNMHWVRQAAPKGLEWVGAIYPNGATSY	60	
		: : : : :	:	:
Qy	61	NQPKDPTISVDKSKNTLYLQNMSLRADTVAVYYCARGIYF-VGTYYFDYWGGTLVTVV	119	
		: : : : :	:	:
Dd	61	NQPKGRFTISVDKSKNTLYLQNMSLRADTVAVYYCARVVVYSRYNYFDYWGGTLVTVV	120	
Qy	120 SS	121		
Dd	121 SS	122		

Search completed: April 13, 2006, 17:25:17
Job time : 17.9651 secs

GenCore version 5.1.7
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DM protein - protein search, using sw model

Run on: April 13, 2006, 17:21:05 ; Search time 16.0349 Seconds
(without alignments)
286.178 Million cell updates/sec

Title: US-10-727-737-2
Perfect score: 560
Sequence: 1 DIQMTQSPSSLSASVGRVT.....QQHNEYPLTFGQTKVEIKR 108

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 217505 seqs, 42489236 residues

Total number of hits satisfying chosen parameters: 217505

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published Applications AA New:
1: /SIDSS5/ptodata/1/pubpaa/US08_NEW_PUB.pap.*
2: /SIDSS5/ptodata/1/pubpaa/US06_NEW_PUB.pap.*
3: /SIDSS5/ptodata/1/pubpaa/US07_NEW_PUB.pap.*
4: /SIDSS5/ptodata/1/pubpaa/PCT_NEW_PUB.pap.*
5: /SIDSS5/ptodata/1/pubpaa/US09_NEW_PUB.pap.*
6: /SIDSS5/ptodata/1/pubpaa/US10_NEW_PUB.pap.*
7: /SIDSS5/ptodata/1/pubpaa/US11_NEW_PUB.pap.*
8: /SIDSS5/ptodata/1/pubpaa/US60_NEW_PUB.pap.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	560	100.0	108	6	US-10-665-658-2
2	560	100.0	108	7	US-11-051-453-46
3	560	100.0	214	7	US-11-127-932-14
4	555	99.1	107	7	US-11-127-932-18
5	555	99.1	107	7	US-11-127-903-14
6	506	90.4	108	6	US-10-834-397-14
7	506	90.4	108	6	US-10-834-397-14
8	506	90.4	108	7	US-11-049-536-700
9	506	90.4	108	7	US-11-049-536-700
10	506	90.4	108	7	US-11-199-739-700
11	506	90.4	108	7	US-11-199-739-700
12	506	90.4	108	7	US-11-041-095-25
13	506	90.4	108	6	US-10-925-366A-3
14	506	90.4	108	6	US-10-925-366A-3
15	501	89.5	107	7	US-11-051-453-30
16	501	89.5	107	7	US-11-051-453-30
17	501	89.5	107	7	US-11-041-095-13
18	501	89.5	107	7	US-11-041-095-13
19	501	89.5	107	7	US-11-041-095-19
20	501	89.5	108	7	US-11-102-512-6
21	501	89.5	109	6	US-10-834-397-28
22	501	89.5	109	6	US-10-834-397-28
23	497	88.8	108	6	US-10-771-257-73
24	497	88.8	108	7	US-11-127-677-75
25	496	88.6	107	7	US-11-051-453-32

26	496	88.6	129	7	US-11-051-453-46
27	495	88.4	109	7	US-11-127-932-14
28	495	88.4	109	7	US-11-127-932-18
29	495	88.4	109	7	US-11-127-903-14
30	495	88.4	109	7	US-11-127-903-18
31	493	88.0	108	6	US-10-834-397-14
32	492	87.9	214	7	US-11-049-536-700
33	492	87.9	214	7	US-11-199-739-700
34	492	87.9	214	7	US-11-199-739-700
35	491	87.7	234	7	US-11-041-095-25
36	491	87.7	239	7	US-11-041-095-19
37	491	87.7	290	7	US-11-041-095-13
38	490	87.5	107	7	US-11-051-453-30
39	490	87.5	108	6	US-10-925-366A-3
40	490	87.5	108	6	US-10-925-366A-6
41	490	87.5	108	7	US-11-102-512-6
42	490	87.5	108	7	US-11-102-512-6
43	490	87.5	108	7	US-11-098-758-3
44	490	87.5	108	7	US-11-098-758-6
45	490	87.5	111	7	US-11-049-536-100

ALIGNMENTS

RESULT 1
US-10-665-658-2
; Publication 2, Application US/10665658
; Publication No. US20050276801A1
; GENERAL INFORMATION:
; APPLICANT: Gardieu, Paula M.
; Presta, Leonard G.
; TITLE OF INVENTION: Humanized Anti-CD11a Antibodies
; NUMBER OF SEQUENCES: 71
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WinPatIn (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/665,658
; FILING DATE: 19-Sep-2003
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/031971
; FILING DATE: 27-NOV-1996
; APPLICATION NUMBER: 08/974899
; FILING DATE: 20-NOV-1997
; APPLICATION NUMBER: 09/420745
; FILING DATE: 20-OCT-1999
; APPLICATION NUMBER: 09/975798
; FILING DATE: 28-FEB-2001
; ATTORNEY/AGENT INFORMATION:
; NAME: Tan, Lee K.
; REGISTRATION NUMBER: 39,447
; REFERENCE/DOCKET NUMBER: P1014R1C1D1C1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-4462
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 108 amino acids
; TYPE: Amino acid
; TOPOLOGY: Linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-10-665-658-2

```
; FEATURE:
; OTHER INFORMATION: Sequence is synthesized
US-11-208-422-15

Query Match      100.0%; Score 560; DB 6; Length 108;
Best Local Similarity 100.0%; Pred. No. 3.2e-39;
Matches 108; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DIQWTQSPSSLSASVGRVTTTCRASTISKYLAWYQOKPKAPKLLIYSGSTLQSGVPS 60
Db 1 DIQWTQSPSSLSASVGRVTTTCRASTISKYLAWYQOKPKAPKLLIYSGSTLQSGVPS 60
Qy 61 RFGSGSGTDFTLTITISSLPQEDPATYCCQHNEYPLTFGGQTKVEIKR 108
Db 61 RFGSGSGTDFTLTITISSLPQEDPATYCCQHNEYPLTFGGQTKVEIKR 108

RESULT 2
US-11-208-422-13
; Sequence 13, Application US/11208422
; Publication No. US20060067930A1
; GENERAL INFORMATION:
; APPLICANT: Adams, Camellia W.
; APPLICANT: Lien, Samantha
; APPLICANT: Lowman, Henry B.
; APPLICANT: Marvin, Jonathan S.
; APPLICANT: Meng, Yu-Ju G.
; TITLE OF INVENTION: POLYPEPTIDE VARIANTS WITH ALTERED EFFECTOR FUNCTION
; FILE REFERENCE: P2158R1
; CURRENT APPLICATION NUMBER: US/11/208,422
; CURRENT FILING DATE: 2005-08-19
; PRIOR APPLICATION NUMBER: US 60/603,057
; PRIOR FILING DATE: 2004-08-19
; NUMBER OF SEQ ID NOS: 54
; SEQ ID NO 13
; LENGTH: 108
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Sequence is synthesized
US-11-208-422-13

Query Match      100.0%; Score 560; DB 7; Length 108;
Best Local Similarity 100.0%; Pred. No. 3.2e-39;
Matches 108; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DIQWTQSPSSLSASVGRVTTTCRASTISKYLAWYQOKPKAPKLLIYSGSTLQSGVPS 60
Db 1 DIQWTQSPSSLSASVGRVTTTCRASTISKYLAWYQOKPKAPKLLIYSGSTLQSGVPS 60
Qy 61 RFGSGSGTDFTLTITISSLPQEDPATYCCQHNEYPLTFGGQTKVEIKR 108
Db 61 RFGSGSGTDFTLTITISSLPQEDPATYCCQHNEYPLTFGGQTKVEIKR 108

RESULT 3
US-11-208-422-15
; Sequence 15, Application US/11208422
; Publication No. US20060067930A1
; GENERAL INFORMATION:
; APPLICANT: Adams, Camellia W.
; APPLICANT: Lien, Samantha
; APPLICANT: Lowman, Henry B.
; APPLICANT: Marvin, Jonathan S.
; APPLICANT: Meng, Yu-Ju G.
; TITLE OF INVENTION: POLYPEPTIDE VARIANTS WITH ALTERED EFFECTOR FUNCTION
; FILE REFERENCE: P2158R1
; CURRENT APPLICATION NUMBER: US/11/208,422
; CURRENT FILING DATE: 2005-08-19
; PRIOR APPLICATION NUMBER: US 60/603,057
; PRIOR FILING DATE: 2004-08-19
; NUMBER OF SEQ ID NOS: 54
; SEQ ID NO 15
; LENGTH: 214
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Sequence is synthesized
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; FEATURE:
; OTHER INFORMATION: Sequence is synthesized
US-11-208-422-15

Query Match      100.0%; Score 560; DB 7; Length 214;
Best Local Similarity 100.0%; Pred. No. 5.9e-39;
Matches 108; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DIQWTQSPSSLSASVGRVTTTCRASTISKYLAWYQOKPKAPKLLIYSGSTLQSGVPS 60
Db 1 DIQWTQSPSSLSASVGRVTTTCRASTISKYLAWYQOKPKAPKLLIYSGSTLQSGVPS 60
Qy 61 RFGSGSGTDFTLTITISSLPQEDPATYCCQHNEYPLTFGGQTKVEIKR 108
Db 61 RFGSGSGTDFTLTITISSLPQEDPATYCCQHNEYPLTFGGQTKVEIKR 108

RESULT 4
US-11-107-028-49
; Sequence 49, Application US/11107028
; Publication No. US20050276803A1
; GENERAL INFORMATION:
; APPLICANT: CHAN, ANDREW C.
; APPLICANT: GONG, QIAN
; TITLE OF INVENTION: Method for Augmenting B Cell Depletion
; FILE REFERENCE: P2112R1
; CURRENT APPLICATION NUMBER: US/11/107,028
; CURRENT FILING DATE: 2005-04-15
; PRIOR APPLICATION NUMBER: US 60/563,263
; PRIOR FILING DATE: 2004-04-16
; NUMBER OF SEQ ID NOS: 52
; SEQ ID NO 49
; LENGTH: 107
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: sequence is synthesized
US-11-107-028-49

Query Match      99.1%; Score 555; DB 7; Length 107;
Best Local Similarity 100.0%; Pred. No. 8.1e-39;
Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DIQWTQSPSSLSASVGRVTTTCRASTISKYLAWYQOKPKAPKLLIYSGSTLQSGVPS 60
Db 1 DIQWTQSPSSLSASVGRVTTTCRASTISKYLAWYQOKPKAPKLLIYSGSTLQSGVPS 60
Qy 61 RFGSGSGTDFTLTITISSLPQEDPATYCCQHNEYPLTFGGQTKVEIK 107
Db 61 RFGSGSGTDFTLTITISSLPQEDPATYCCQHNEYPLTFGGQTKVEIK 107

RESULT 5
US-11-149-031-1
; Sequence 1, Application US/11149031
; Publication No. US20060013818A1
; GENERAL INFORMATION:
; APPLICANT: GOFPE, BERNARD S.
; TITLE OF INVENTION: Method of Treating Granuloma Annulare or Sarcoid
; FILE REFERENCE: P2129R1
; CURRENT APPLICATION NUMBER: US/11/149,031
; CURRENT FILING DATE: 2005-06-08
; PRIOR APPLICATION NUMBER: US 60/578,768
; PRIOR FILING DATE: 2004-06-09
; PRIOR APPLICATION NUMBER: US 60/579,096
; PRIOR FILING DATE: 2004-06-10
; NUMBER OF SEQ ID NOS: 4
; SEQ ID NO 1
; LENGTH: 107
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
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; OTHER INFORMATION: sequence is synthesized
US-11-149-031-1

Query Match 99.1%; Score 555; DB 7; Length 107;
Best Local Similarity 100.0%; Pred. No. 8.1e-39;
Matches 107; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DIQMTQSPSSLSASVGRVITTCRASKTISKYLAWSKPKKLLIYSGSTLQSGVPS 60
Db 1 DIQMTQSPSSLSASVGRVITTCRASKTISKYLAWSKPKKLLIYSGSTLQSGVPS 60
Qy 61 RFGSGSGTDFTLTISSLPEDFATYYCOQHNEYPPLTFGQGTKEIK 107
Db 61 RFGSGSGTDFTLTISSLPEDFATYYCOQHNEYPPLTFGQGTKEIK 107

RESULT 6
US-10-665-658-3
; Sequence 3, Application US/10665658
; Publication No. US20050276801A1
; GENERAL INFORMATION:
; APPLICANT: Jardieu, Paula M.
; Presta, Leonard G.
; TITLE OF INVENTION: Humanized Anti-CD11a Antibodies
; NUMBER OF SEQUENCES: 71
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080

COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatIn (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/665,658
FILING DATE: 19-Sep-2003
CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/031971
FILING DATE: 27-NOV-1996
APPLICATION NUMBER: 08/974899
FILING DATE: 20-NOV-1997
APPLICATION NUMBER: 09/420745
FILING DATE: 20-OCT-1999
APPLICATION NUMBER: 09/975798
FILING DATE: 28-FEB-2001
ATTORNEY/AGENT INFORMATION:
NAME: Tan, Lee K.
REGISTRATION NUMBER: 39,447
REFERENCE/DOCKET NUMBER: P1014R1C1D1C1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-4462
TELEFAX: 650/952-9881
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 108 amino acids
TYPE: Amino Acid
TOPOLOGY: Linear
SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-10-665-658-3

Query Match 90.4%; Score 506; DB 6; Length 108;
Best Local Similarity 89.8%; Pred. No. 7.9e-35;
Matches 97; Conservative 6; Mismatches 5; Indels 0; Gaps 0;

Qy 1 DIQMTQSPSSLSASVGRVITTCRASKTISKYLAWSKPKKLLIYSGSTLQSGVPS 60
Db 1 DIQMTQSPSSLSASVGRVITTCRASKTISKYLAWSKPKKLLIYSGSTLQSGVPS 60

Qy 61 RFGSGSGTDFTLTISSLPEDFATYYCOQHNEYPPLTFGQGTKEIKR 108
Db 61 RFGSGSGTDFTLTISSLPEDFATYYCOQHNEYPPLTFGQGTKEIKR 108

RESULT 7
US-11-120-338-3
; Sequence 3, Application US/11120338
; Publication No. US20050271659A1
; GENERAL INFORMATION:
; APPLICANT: BRUNETTA, PAUL G.
; APPLICANT: GREWAL, IOBAL S.
; APPLICANT: WALICKE, PATRICIA A.
; TITLE OF INVENTION: PREVENTING AUTOIMMUNE DISEASE
; FILE REFERENCE: P2079R2
; CURRENT APPLICATION NUMBER: US/11/120,338
; CURRENT FILING DATE: 2005-05-03
; PRIOR APPLICATION NUMBER: US 60/568,460
; PRIOR FILING DATE: 2004-05-05
; NUMBER OF SEQ ID NOS: 25
; SEQ ID NO 3
; LENGTH: 108
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: sequence is synthesized
US-11-120-338-3

Query Match 90.4%; Score 506; DB 7; Length 108;
Best Local Similarity 89.8%; Pred. No. 7.9e-35;
Matches 97; Conservative 6; Mismatches 5; Indels 0; Gaps 0;

Qy 1 DIQMTQSPSSLSASVGRVITTCRASKTISKYLAWSKPKKLLIYSGSTLQSGVPS 60
Db 1 DIQMTQSPSSLSASVGRVITTCRASKTISKYLAWSKPKKLLIYSGSTLQSGVPS 60
Qy 61 RFGSGSGTDFTLTISSLPEDFATYYCOQHNEYPPLTFGQGTKEIKR 108
Db 61 RFGSGSGTDFTLTISSLPEDFATYYCOQHNEYPPLTFGQGTKEIKR 108

RESULT 8
US-11-143-077-3
; Sequence 3, Application US/11143077
; Publication No. US20060024295A1
; GENERAL INFORMATION:
; APPLICANT: Brunetta, Paul G.
; TITLE OF INVENTION: METHOD FOR TREATING LUPUS
; FILE REFERENCE: P2133R1
; CURRENT APPLICATION NUMBER: US/11/143,077
; CURRENT FILING DATE: 2005-06-02
; PRIOR APPLICATION NUMBER: US 60/577,235
; PRIOR FILING DATE: 2004-06-04
; PRIOR APPLICATION NUMBER: US 60/617,997
; PRIOR FILING DATE: 2004-10-11
; NUMBER OF SEQ ID NOS: 24
; SEQ ID NO 3
; LENGTH: 108
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Sequence is synthesized
US-11-143-077-3

Query Match 90.4%; Score 506; DB 7; Length 108;
Best Local Similarity 89.8%; Pred. No. 7.9e-35;
Matches 97; Conservative 6; Mismatches 5; Indels 0; Gaps 0;

Qy 1 DIQMTQSPSSLSASVGRVITTCRASKTISKYLAWSKPKKLLIYSGSTLQSGVPS 60
Db 1 DIQMTQSPSSLSASVGRVITTCRASKTISKYLAWSKPKKLLIYSGSTLQSGVPS 60
Qy 61 RFGSGSGTDFTLTISSLPEDFATYYCOQHNEYPPLTFGQGTKEIKR 108

Db 61 RFGSGSGTDTLTITSSLPQDFATYCCQYNLSLFWTFGGQTKVEIKR 108
|||||

RESULT 9

US-11-190-364-3
; Sequence 3, Application US/11190364
; Publication No. US20060024300A1
; GENERAL INFORMATION:
; APPLICANT: Adams ET AL.
; TITLE OF INVENTION: Immunoglobulin Variants and Uses Thereof
; FILE REFERENCE: P1990R3C1P1
; CURRENT APPLICATION NUMBER: US/11/190,364
; CURRENT FILING DATE: 2005-07-26
; PRIOR APPLICATION NUMBER: US 60/434,115
; PRIOR FILING DATE: 2002-12-16
; PRIOR APPLICATION NUMBER: US 60/526,163
; PRIOR FILING DATE: 2003-12-01
; PRIOR APPLICATION NUMBER: PCT/US03/40426
; PRIOR FILING DATE: 2003-12-16
; PRIOR APPLICATION NUMBER: US 11/147,780
; PRIOR FILING DATE: 2005-06-07
; NUMBER OF SEQ ID NOS: 38
; SEQ ID NO 3
; LENGTH: 108
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Sequence is synthesized
US-11-190-364-3

Query Match 90.4%; Score 506; DB 7; Length 108;
Best Local Similarity 89.8%; Pred. No. 7.9e-35;
Matches 97; Conservative 6; Mismatches 5; Indels 0; Gaps 0;

Qy 1 DIQWQSPSSLSASVGRVITTCRAKSTISKYLAWYQOKFGKAPKLLIYSGSTLQSGVPS 60
|||||

Db 1 DIQWQSPSSLSASVGRVITTCRAKSTISKYLAWYQOKFGKAPKLLIYSGSTLQSGVPS 60
|||||

Qy 61 RFGSGSGTDTLTITSSLPQDFATYCCQYNLSLFWTFGGQTKVEIKR 108
|||||

Db 61 RFGSGSGTDTLTITSSLPQDFATYCCQYNLSLFWTFGGQTKVEIKR 108
|||||

RESULT 10

US-11-147-780-3
; Sequence 3, Application US/11147780
; Publication No. US20060034835A1
; GENERAL INFORMATION:
; APPLICANT: Adams ET AL.
; TITLE OF INVENTION: Immunoglobulin Variants and Uses Thereof
; FILE REFERENCE: P1990R3C1
; CURRENT APPLICATION NUMBER: US/11/147,780
; CURRENT FILING DATE: 2005-06-07
; PRIOR APPLICATION NUMBER: US 60/434,115
; PRIOR FILING DATE: 2002-12-16
; PRIOR APPLICATION NUMBER: US 60/526,163
; PRIOR FILING DATE: 2003-12-01
; PRIOR APPLICATION NUMBER: PCT/US03/40426
; PRIOR FILING DATE: 2003-12-16
; NUMBER OF SEQ ID NOS: 38
; SEQ ID NO 3
; LENGTH: 108
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Sequence is synthesized
US-11-147-780-3

Query Match 90.4%; Score 506; DB 7; Length 108;
Best Local Similarity 89.8%; Pred. No. 7.9e-35;
Matches 97; Conservative 6; Mismatches 5; Indels 0; Gaps 0;

Qy 1 DIQWQSPSSLSASVGRVITTCRAKSTISKYLAWYQOKFGKAPKLLIYSGSTLQSGVPS 60
|||||

Db 1 DIQWQSPSSLSASVGRVITTCRAKSTISKYLAWYQOKFGKAPKLLIYSGSTLQSGVPS 60
|||||

Qy 61 RFGSGSGTDTLTITSSLPQDFATYCCQYNLSLFWTFGGQTKVEIKR 108
|||||

Db 61 RFGSGSGTDTLTITSSLPQDFATYCCQYNLSLFWTFGGQTKVEIKR 108
|||||

Qy 1 DIQWQSPSSLSASVGRVITTCRAKSTISKYLAWYQOKFGKAPKLLIYSGSTLQSGVPS 60
|||||

Db 1 DIQWQSPSSLSASVGRVITTCRAKSTISKYLAWYQOKFGKAPKLLIYSGSTLQSGVPS 60
|||||

Qy 61 RFGSGSGTDTLTITSSLPQDFATYCCQYNLSLFWTFGGQTKVEIKR 108
|||||

Db 61 RFGSGSGTDTLTITSSLPQDFATYCCQYNLSLFWTFGGQTKVEIKR 108
|||||

RESULT 11

US-11-143-386-3
; Sequence 3, Application US/11143386
; Publication No. US20060051345A1
; GENERAL INFORMATION:
; APPLICANT: FROHNA, PAUL A.
; TITLE OF INVENTION: METHOD FOR TREATING MULTIPLE SCLEROSIS
; FILE REFERENCE: P2134R1
; CURRENT APPLICATION NUMBER: US/11/143,386
; CURRENT FILING DATE: 2005-06-02
; PRIOR APPLICATION NUMBER: US 60/576,993
; PRIOR FILING DATE: 2004-06-04
; NUMBER OF SEQ ID NOS: 25
; SEQ ID NO 3
; LENGTH: 108
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Sequence is synthesized.
US-11-143-386-3

Query Match 90.4%; Score 506; DB 7; Length 108;
Best Local Similarity 89.8%; Pred. No. 7.9e-35;
Matches 97; Conservative 6; Mismatches 5; Indels 0; Gaps 0;

Qy 1 DIQWQSPSSLSASVGRVITTCRAKSTISKYLAWYQOKFGKAPKLLIYSGSTLQSGVPS 60
|||||

Db 1 DIQWQSPSSLSASVGRVITTCRAKSTISKYLAWYQOKFGKAPKLLIYSGSTLQSGVPS 60
|||||

Qy 61 RFGSGSGTDTLTITSSLPQDFATYCCQYNLSLFWTFGGQTKVEIKR 108
|||||

Db 61 RFGSGSGTDTLTITSSLPQDFATYCCQYNLSLFWTFGGQTKVEIKR 108
|||||

RESULT 12

US-11-187-364-3
; Sequence 3, Application US/11187364
; Publication No. US20060062787A1
; GENERAL INFORMATION:
; APPLICANT: Hitrava, Elena
; TITLE OF INVENTION: METHOD FOR TREATING SJOGREN'S SYNDROME
; FILE REFERENCE: P2149R1
; CURRENT APPLICATION NUMBER: US/11/187,364
; CURRENT FILING DATE: 2005-07-21
; PRIOR APPLICATION NUMBER: US 60/590,302
; PRIOR FILING DATE: 2004-07-22
; NUMBER OF SEQ ID NOS: 36
; SEQ ID NO 3
; LENGTH: 108
; TYPE: PRT
; ORGANISM: Homo sapiens
; OTHER INFORMATION: Sequence is synthesized
US-11-187-364-3

Query Match 90.4%; Score 506; DB 7; Length 108;
Best Local Similarity 89.8%; Pred. No. 7.9e-35;
Matches 97; Conservative 6; Mismatches 5; Indels 0; Gaps 0;

Qy 1 DIQWQSPSSLSASVGRVITTCRAKSTISKYLAWYQOKFGKAPKLLIYSGSTLQSGVPS 60
|||||

Db 1 DIQWQSPSSLSASVGRVITTCRAKSTISKYLAWYQOKFGKAPKLLIYSGSTLQSGVPS 60
|||||

Qy 61 RFGSGSGTDTLTITSSLPQDFATYCCQYNLSLFWTFGGQTKVEIKR 108
|||||

Db 61 RFGSGSGTDTLTITSSLPQDFATYCCQYNLSLFWTFGGQTKVEIKR 108
|||||

```
RESULT 13
US-10-981-356A-5
; Sequence 5, Application US/10981356A
; Publication No. US20060015952A1
; GENERAL INFORMATION:
; APPLICANT: FILVAROFF, ELLEN H.
; TITLE OF INVENTION: SCREENING ASSAYS AND METHODS OF TUMOR TREATMENT
; FILE REFERENCE: P2069R1
; CURRENT APPLICATION NUMBER: US/10/981.356A
; CURRENT FILING DATE: 2004-11-04
; PRIOR APPLICATION NUMBER: US 60/520,398
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/557,951
; PRIOR FILING DATE: 2004-03-31
; NUMBER OF SEQ ID NOS: 45
; SEQ ID NO 5
; LENGTH: 109
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Sequence is synthesized
US-10-981-356A-5

Query Match      90.4%; Score 506; DB 6; Length 109;
Best Local Similarity 89.8%; Pred. No. 8e-35;
Matches 97; Conservative 6; Mismatches 5; Indels 0; Gaps 0;

Qy 1 DIQMTQSPSSLSASVGRVTITCRASKTISKYLAWYQKPKAPKLLIYSGSTLQSGVPS 60
Db 1 DIQMTQSPSSLSASVGRVTITCRASQISINYLAWYQKPKAPKLLIYAASSLESQVPS 60

Qy 61 RFSGSGGTDTLTITSSLPQEDPATYTCQYNSLPWTFTGGQTKVEIKR 108
Db 61 RFSGSGGTDTLTITSSLPQEDPATYTCQYNSLPWTFTGGQTKVEIKR 108

RESULT 14
US-11-096-046-5
; Sequence 5, Application US/11096046
; Publication No. US20050276802A1
; GENERAL INFORMATION:
; APPLICANT: ADAMS, CAMELLIA W.
; APPLICANT: FERRARA, NAPOLEONE
; APPLICANT: FILVAROFF, ELLEN H.
; APPLICANT: MAO, WEIGUANG
; APPLICANT: PRESTA, LEONARD G.
; APPLICANT: TEJADA, MAX L.
; TITLE OF INVENTION: Humanized Anti-TGF-Beta Antibodies
; FILE REFERENCE: P1954R1US
; CURRENT APPLICATION NUMBER: US/11/096.046
; CURRENT FILING DATE: 2005-03-31
; PRIOR APPLICATION NUMBER: US 60/558,290
; PRIOR FILING DATE: 2004-03-31
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 5
; LENGTH: 109
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: sequence is synthesized
US-11-096-046-5

Query Match      90.4%; Score 506; DB 7; Length 109;
Best Local Similarity 89.8%; Pred. No. 8e-35;
Matches 97; Conservative 6; Mismatches 5; Indels 0; Gaps 0;

Qy 1 DIQMTQSPSSLSASVGRVTITCRASKTISKYLAWYQKPKAPKLLIYSGSTLQSGVPS 60
Db 1 DIQMTQSPSSLSASVGRVTITCRASQISINYLAWYQKPKAPKLLIYAASSLESQVPS 60

Qy 61 RFSGSGGTDTLTITSSLPQEDPATYTCQYNSLPWTFTGGQTKVEIKR 108
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Db 61 RFSGSGGTDTLTITSSLPQEDPATYTCQYNSLPWTFTGGQTKVEIKR 108

RESULT 15
US-11-154-337-5
; Sequence 5, Application US/11154337
; Publication No. US20060013819A1
; GENERAL INFORMATION:
; APPLICANT: KELSEY, STEPHEN M.
; TITLE OF INVENTION: THERAPY OF PLATINUM-RESISTANT CANCER
; FILE REFERENCE: P2146R1
; CURRENT APPLICATION NUMBER: US/11/154.337
; CURRENT FILING DATE: 2005-06-15
; PRIOR APPLICATION NUMBER: US 60/580,333
; PRIOR FILING DATE: 2004-06-16
; NUMBER OF SEQ ID NOS: 17
; SEQ ID NO 5
; LENGTH: 107
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: sequence is synthesized
US-11-154-337-5

Query Match      89.5%; Score 501; DB 7; Length 107;
Best Local Similarity 89.7%; Pred. No. 2e-34;
Matches 96; Conservative 6; Mismatches 5; Indels 0; Gaps 0;

Qy 1 DIQMTQSPSSLSASVGRVTITCRASKTISKYLAWYQKPKAPKLLIYSGSTLQSGVPS 60
Db 1 DIQMTQSPSSLSASVGRVTITCRASQISINYLAWYQKPKAPKLLIYAASSLESQVPS 60

Qy 61 RFSGSGGTDTLTITSSLPQEDPATYTCQYNSLPWTFTGGQTKVEIKR 107
Db 61 RFSGSGGTDTLTITSSLPQEDPATYTCQYNSLPWTFTGGQTKVEIKR 107

Search completed: April 13, 2006, 17:25:18
Job time : 17.0349 secs
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GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioceleration Ltd.

OM protein - protein search, using sw model

Run on: April 13, 2006, 17:19:49 ; Search time 106.114 Seconds
(without alignments)
425.257 Million cell updates/sec

Title: US-10-727-737-2
Perfect score: 560
Sequence: 1 DIQMTQSPSSLSASVGRVT.....QQHNEYPLTFGQGTKEIKR 108

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1867569 seqs, 417829326 residues

Total number of hits satisfying chosen parameters: 1867569

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published Applications AA Main:
1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*
2: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
3: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*
4: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*
5: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
6: /cgn2_6/ptodata/1/pubpaa/US11_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	560	100.0	108	3	US-09-795-798-2
2	560	100.0	108	4	US-10-727-737-2
3	560	100.0	108	5	US-10-877-532-5
4	560	100.0	214	4	US-10-423-299-3
5	546.5	97.6	109	3	US-09-726-258-47
6	506	90.4	108	3	US-09-056-160B-12
7	506	90.4	108	3	US-09-795-798-3
8	506	90.4	108	4	US-10-234-671-12
9	506	90.4	108	4	US-10-727-737-3
10	506	90.4	108	5	US-10-861-049-38
11	506	90.4	108	5	US-10-974-591-12
12	506	90.4	108	6	US-11-021-874-38
13	506	90.4	109	3	US-09-811-123-6
14	506	90.4	110	4	US-10-044-896-4
15	505	90.2	127	3	US-09-809-739-10
16	505	90.2	127	5	US-10-662-061-10
17	505	90.2	233	4	US-10-404-724-68
18	504	90.0	109	5	US-10-835-641-3
19	502	89.6	108	5	US-10-783-311-126
20	501	89.5	107	4	US-10-268-501-5
21	501	89.5	107	4	US-10-608-626-5
22	501	89.5	107	4	US-10-600-152-14
23	501	89.5	107	4	US-10-619-754-5
24	501	89.5	107	5	US-10-835-641-18
25	501	89.5	107	5	US-10-719-310-5
26	501	89.5	107	6	US-11-044-749-5
27	501	89.5	107	6	US-11-154-465-5

28	501	89.5	108	4	US-10-125-687-8	Sequence 8, Appli
29	501	89.5	108	5	US-10-996-191-8	Sequence 8, Appli
30	497	88.8	108	5	US-10-938-353-117	Sequence 117, App
31	494	88.2	108	5	US-10-725-962-36	Sequence 36, Appl
32	494	88.2	108	5	US-10-725-962-38	Sequence 38, Appl
33	494	88.2	236	3	US-09-859-053-30	Sequence 30, Appl
34	494	88.2	236	4	US-10-800-250-30	Sequence 30, Appl
35	494	88.2	236	4	US-10-625-105-30	Sequence 30, Appl
36	493	88.0	107	5	US-10-727-155-312	Sequence 312, App
37	493	88.0	108	4	US-10-408-901-20	Sequence 8, Appli
38	493	88.0	126	4	US-10-469-125-8	Sequence 20, Appl
39	493	88.0	129	5	US-10-910-901-20	Sequence 44, Appl
40	493	88.0	214	4	US-10-408-901-44	Sequence 6, Appli
41	493	88.0	233	5	US-10-769-144-6	Sequence 6, Appli
42	493	88.0	233	5	US-10-903-191-6	Sequence 24, Appl
43	493	88.0	234	4	US-10-292-088-24	Sequence 105, App
44	492	87.9	107	4	US-10-292-088-105	Sequence 18, Appl
45	492	87.9	108	5	US-10-726-332-18	

ALIGNMENTS

RESULT 1
US-09-795-798-2
; Sequence 2, Application US/09795798
; Publication No. US20030207336A1
; GENERAL INFORMATION:
; APPLICANT: Presta, Leonard G.
; TITLE OF INVENTION: Humanized Anti-CD11a Antibodies
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WinPatin (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/795,798
; FILING DATE: 28-Feb-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/974,899
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Lee, Wendy M.
; REGISTRATION NUMBER: 40,378
; REFERENCE/DOCKET NUMBER: P1014R1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-1994
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 108 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-795-798-2

Query Match 100.0%; Score 560; DB 3; Length 108;
Best Local Similarity 100.0%; Pred. No. 4e-39;
Matches 108; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DIQMTQSPSSLSASVGRVTITCRASKTISKYLAWYQOKPKAPKLLIYSGTLOSQVPS 60
Db 1 DIQMTQSPSSLSASVGRVTITCRASKTISKYLAWYQOKPKAPKLLIYSGTLOSQVPS 60

QY 61 RFSGSGSGTDTLTITISLQPEDFATYYCQOHNEYPITFGGQTKVEIKR 108
|
Db 61 RFSGSGSGTDTLTITISLQPEDFATYYCQOHNEYPITFGGQTKVEIKR 108

RESULT 2
US-10-727-737-2
; Sequence 2, Application US/10727737
; Publication No. US20040146507A1
; GENERAL INFORMATION:
; APPLICANT: Presta, Leonard G.
; ; Jardieu, Paula M.
; TITLE OF INVENTION: Antibody Mutants
; NUMBER OF SEQUENCES: 79
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WinPatIn (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/727,737
; FILING DATE: 03-Dec-2003
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/975,329B
; FILING DATE: 20-Nov-1997
; APPLICATION NUMBER: 60/031945
; FILING DATE: 27-Nov-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Lee, Wendy M.
; REGISTRATION NUMBER: 40,378
; REFERENCE/DOCKET NUMBER: P1064R1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-1994
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 108 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-10-727-737-2

Query Match 100.0%; Score 560; DB 4; Length 108;
Best Local Similarity 100.0%; Pred. No. 4e-39;
Matches 108; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DIQWTSPLSLSASVGDRTVITCRASKTISKYLAWYQKPKAPKLLIYSGSTLQSGVPS 60
|
Db 1 DIQWTSPLSLSASVGDRTVITCRASKTISKYLAWYQKPKAPKLLIYSGSTLQSGVPS 60

QY 61 RFSGSGSGTDTLTITISLQPEDFATYYCQOHNEYPITFGGQTKVEIKR 108
|
Db 61 RFSGSGSGTDTLTITISLQPEDFATYYCQOHNEYPITFGGQTKVEIKR 108

RESULT 3
US-10-877-532-5
; Sequence 5, Application US/10877532
; Publication No. US20050038231A1
; GENERAL INFORMATION:
; APPLICANT: FAHRNER, ROBERT L.
; APPLICANT: LAVERDIERE, AMY
; APPLICANT: MCDONALD, PAUL J.
; APPLICANT: O'LEARY, RHONA M.

; TITLE OF INVENTION: REDUCING PROTEIN A LEACHING DURING PROTEIN A AFFINITY CHROMATOGRAPHY
; FILE REFERENCE: P2015R1
; CURRENT APPLICATION NUMBER: US/10/877,532
; CURRENT FILING DATE: 2004-06-24
; PRIOR APPLICATION NUMBER: US 60/490,500
; PRIOR FILING DATE: 2003-07-28
; NUMBER OF SEQ ID NOS: 8
; SEQ ID NO 5
; LENGTH: 108
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: sequence is synthesized
US-10-877-532-5

Query Match 100.0%; Score 560; DB 5; Length 108;
Best Local Similarity 100.0%; Pred. No. 4e-39;
Matches 108; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DIQWTSPLSLSASVGDRTVITCRASKTISKYLAWYQKPKAPKLLIYSGSTLQSGVPS 60
|
Db 1 DIQWTSPLSLSASVGDRTVITCRASKTISKYLAWYQKPKAPKLLIYSGSTLQSGVPS 60

QY 61 RFSGSGSGTDTLTITISLQPEDFATYYCQOHNEYPITFGGQTKVEIKR 108
|
Db 61 RFSGSGSGTDTLTITISLQPEDFATYYCQOHNEYPITFGGQTKVEIKR 108

RESULT 4
US-10-423-299-3
; Sequence 3, Application US/10423299
; Publication No. US20030229212A1
; GENERAL INFORMATION:
; APPLICANT: FAHRNER, ROBERT
; APPLICANT: FOLLMAN, DEBORAH
; APPLICANT: LEBRETON, BENEDICTE
; APPLICANT: VAN REIS, ROBERT
; TITLE OF INVENTION: NON-AFFINITY PURIFICATION OF PROTEINS
; FILE REFERENCE: 39766-0121A
; CURRENT APPLICATION NUMBER: US/10/423,299
; CURRENT FILING DATE: 2003-04-25
; PRIOR APPLICATION NUMBER: US 60/375,953
; PRIOR FILING DATE: 2002-04-26
; NUMBER OF SEQ ID NOS: 4
; SEQ ID NO 3
; LENGTH: 214
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Sequence is synthesized
US-10-423-299-3

Query Match 100.0%; Score 560; DB 4; Length 214;
Best Local Similarity 100.0%; Pred. No. 7.8e-39;
Matches 108; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DIQWTSPLSLSASVGDRTVITCRASKTISKYLAWYQKPKAPKLLIYSGSTLQSGVPS 60
|
Db 1 DIQWTSPLSLSASVGDRTVITCRASKTISKYLAWYQKPKAPKLLIYSGSTLQSGVPS 60

QY 61 RFSGSGSGTDTLTITISLQPEDFATYYCQOHNEYPITFGGQTKVEIKR 108
|
Db 61 RFSGSGSGTDTLTITISLQPEDFATYYCQOHNEYPITFGGQTKVEIKR 108

RESULT 5
US-09-726-258-47
; Sequence 47, Application US/09726258
; Publication No. US20030021790A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc., Hsei, Vanessa
; APPLICANT: Koumenis, Iphigenia
; APPLICANT: Leong, Steven R.

```

; APPLICANT: Presta, Leonard G.
; APPLICANT: Shahrokh, Zahra
; TITLE OF INVENTION: ANTIBODY FRAGMENT-POLYMER CONJUGATES AND
; TITLE OF INVENTION: HUMANIZED ANTI-IL-8 MONOCLONAL ANTIBODIES
; NUMBER OF SEQUENCES: 72
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WinPatIn (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/726,258
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/234,182
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/094003
; FILING DATE: 24-JUL-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Love, Richard B.
; REGISTRATION NUMBER: 34,659
; REFERENCE/DOCKET NUMBER: P108SR4-1A
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-5530
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 47:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 109 amino acids
; TYPE: amino acid
; TOPOLOGY: Linear
; US-09-726-258-47

Query Match 97.6%; Score 546.5; DB 3; Length 109;
Best Local Similarity 98.2%; Pred. No. 5.4e-38;
Matches 107; Conservative 1; Mismatches 0; Indels 1; Gaps 1;

Qy 1 DIQMTQSPSSLSASVGRVTITCRASKTISKYLAWYQKPKAPKLLI-VYSGSTLQGV 59
Db 1 DIQMTQSPSSLSASVGRVTITCRASKTISKYLAWYQKPKAPKLLIYSGSTLQGV 60

Qy 60 SRFGSGSGTDTLTITSSLOPEDPATYTCQOHNEYPITFGQTKVEIKR 108
Db 61 SRFGSGSGTDTLTITSSLOPEDPATYTCQOHNEYPITFGQTKVEIKR 109

RESULT 6
US-09-056-1608-12
; Sequence 12, Application US/090561608
; Patent No. US20020032315A1
; GENERAL INFORMATION:
; APPLICANT: Baca, Manuel
; APPLICANT: Wells, James A.
; APPLICANT: Presta, Leonard G.
; APPLICANT: Lowman, Henry B.
; APPLICANT: Chen, Yvonne M.
; TITLE OF INVENTION: ANTI-VEGF ANTIBODIES
; NUMBER OF SEQUENCES: 131
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA

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; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WinPatIn (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/056,1608
; FILING DATE: 06-Apr-1998
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/054,856
; FILING DATE: 06-AUG-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Hasak, Janet E.
; REGISTRATION NUMBER: 28,616
; REFERENCE/DOCKET NUMBER: P1093R2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-1896
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 108 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear
; US-09-056-1608-12

Query Match 90.4%; Score 506; DB 3; Length 108;
Best Local Similarity 89.8%; Pred. No. 1.2e-34;
Matches 97; Conservative 6; Mismatches 5; Indels 0; Gaps 0;

Qy 1 DIQMTQSPSSLSASVGRVTITCRASKTISKYLAWYQKPKAPKLLIYSGSTLQGV 60
Db 1 DIQMTQSPSSLSASVGRVTITCRASQISNYLAWYQKPKAPKLLIYAASLSGV 60

Qy 61 RFSGSGSGTDTLTITSSLOPEDPATYTCQOHNEYPITFGQTKVEIKR 108
Db 61 RFSGSGSGTDTLTITSSLOPEDPATYTCQOHNEYPITFGQTKVEIKR 108

RESULT 7
US-09-795-798-3
; Sequence 3, Application US/09795798
; Publication No. US20030207336A1
; GENERAL INFORMATION:
; APPLICANT: Presta, Leonard G.
; TITLE OF INVENTION: Humanized Anti-CD11a Antibodies
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WinPatIn (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/795,798
; FILING DATE: 28-Feb-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/974,899
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Lee, Wendy M.
; REGISTRATION NUMBER: 40,378
; REFERENCE/DOCKET NUMBER: P1014R1
; TELECOMMUNICATION INFORMATION:

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; TELEPHONE: 650/225-1994
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 108 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear
;
; SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-09-795-798-3
;
; Query Match 90.4%; Score 506; DB 3; Length 108;
; Best Local Similarity 89.8%; Pred No. 1.2e-34;
; Matches 97; Conservative 6; Mismatches 5; Indels 0; Gaps 0;
;
QY 1 DIQWTSPSLSASVGDRTVITCRASKTISKYLAWYQOKFKAPKLLIYSGSTLQSGVPS 60
DB 1 DIQWTSPSLSASVGDRTVITCRASQISNYLAWYQOKFKAPKLLIYAASLSQVPS 60
;
QY 61 RFGSGSGDTFTLTISLQPEDFATYYCQOHNEYPITFGQGTKVEIKR 108
DB 61 RFGSGSGDTFTLTISLQPEDFATYYCQYNSLPWITFGQGTKVEIKR 108
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; RESULT 8
; US-10-234-671-12
; Sequence 12, Application US/10234671
; Publication No. US20030190317A1
; GENERAL INFORMATION:
; APPLICANT: Baca, Manuel
; Wells, James A.
; Preeta, Leonard G.
; Lowman, Henry B.
; Chen, Yvonne M.
;
; TITLE OF INVENTION: ANTI-VEGF ANTIBODIES
; NUMBER OF SEQUENCES: 131
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Winpatin (Genentech)
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; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/234,671
; FILING DATE: 03-Sep-2002
; CLASSIFICATION: <Unknown>
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; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/056160
; FILING DATE: 06-APR-1998
; APPLICATION NUMBER: 60/126446
; FILING DATE: 07-APR-1997
; APPLICATION NUMBER: 60/054856
; FILING DATE: 06-AUG-1997
;
; ATTORNEY/AGENT INFORMATION:
; NAME: Cui, Steven X.
; REGISTRATION NUMBER: 44,637
; REFERENCE/DOCKET NUMBER: FL093R2C1
;
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-8674
; TELEFAX: 650/952-9881
;
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 108 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear
;
; SEQUENCE DESCRIPTION: SEQ ID NO: 12:
US-10-234-671-12

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Sequence 38, Application US/10861049
 Publication No. US20050095243A1
 GENERAL INFORMATION:
 APPLICANT: Andrew Chan
 APPLICANT: Qian Gong
 APPLICANT: Flavius Martin
 TITLE OF INVENTION: COMBINATION THERAPY FOR B CELL DISORDERS
 FILE REFERENCE: P2040R1P1
 CURRENT APPLICATION NUMBER: US/10/861,049
 CURRENT FILING DATE: 2004-06-04
 PRIOR APPLICATION NUMBER: US 60/476,531
 PRIOR FILING DATE: 2003-06-06
 PRIOR APPLICATION NUMBER: US 60/476,481
 PRIOR FILING DATE: 2003-06-05
 PRIOR APPLICATION NUMBER: US 60/476,414
 PRIOR FILING DATE: 2003-06-05
 NUMBER OF SEQ ID NOS: 145
 SEQ ID NO 38
 LENGTH: 108
 TYPE: PRT
 ORGANISM: Homo sapiens
 US-10-861-049-38

Query Match 90.4%; Score 506; DB 5; Length 108;
 Best Local Similarity 89.8%; Pred. No. 1.2e-34;
 Matches 97; Conservative 6; Mismatches 5; Indels 0; Gaps 0;

Cy 1 DIQWTQSPSSLSASVGRVITTCRASKTISKYLAWYQKPKAPKLLIYSGSTLQSGVPS 60
 Db 1 DIQWTQSPSSLSASVGRVITTCRASKTISKYLAWYQKPKAPKLLIYSGSTLQSGVPS 60
 Cy 61 RFGSGSGTDTFTLTISLQPEDFATYTCQYHNYPLTFGQGTKEIKR 108
 Db 61 RFGSGSGTDTFTLTISLQPEDFATYTCQYHNYPLTFGQGTKEIKR 108

RESULT 11
 US-10-974-591-12
 Sequence 12, Application US/10974591
 Publication No. US20050112126A1
 GENERAL INFORMATION:
 APPLICANT: Baca, Manuel
 Wells, James A.
 Presta, Leonard G.
 Lowman, Henry B.
 Chen, Yvonne M.
 TITLE OF INVENTION: ANTI-VEGF ANTIBODIES
 NUMBER OF SEQUENCES: 131
 CORRESPONDENCE ADDRESS:
 ADDRESS: Genentech, Inc.
 STREET: 1 DNA Way
 CITY: South San Francisco
 STATE: California
 COUNTRY: USA
 ZIP: 94080
 COMPUTER READABLE FORM:
 MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: WinPatIn (Genentech)
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/10/974,591
 FILING DATE: 26-Oct-2004
 CLASSIFICATION: <Unknown>
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 09/723752
 FILING DATE: 27-NOV-2000
 APPLICATION NUMBER: 08/908469
 FILING DATE: 06-AUG-1997
 APPLICATION NUMBER: 08/833504
 FILING DATE: 07-APR-1997
 ATTORNEY/AGENT INFORMATION:
 NAME: Cui, Steven X.

REGISTRATION NUMBER: 44,637
 REFERENCE/DOCKET NUMBER: P1093P1D1C1
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 650/225-8674
 TELEFAX: 650/952-9881
 INFORMATION FOR SEQ ID NO: 12:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 108 amino acids
 TYPE: Amino Acid
 TOPOLOGY: Linear
 SEQUENCE DESCRIPTION: SEQ ID NO: 12:
 US-10-974-591-12

Query Match 90.4%; Score 506; DB 5; Length 108;
 Best Local Similarity 89.8%; Pred. No. 1.2e-34;
 Matches 97; Conservative 6; Mismatches 5; Indels 0; Gaps 0;

Cy 1 DIQWTQSPSSLSASVGRVITTCRASKTISKYLAWYQKPKAPKLLIYSGSTLQSGVPS 60
 Db 1 DIQWTQSPSSLSASVGRVITTCRASKTISKYLAWYQKPKAPKLLIYSGSTLQSGVPS 60
 Cy 61 RFGSGSGTDTFTLTISLQPEDFATYTCQYHNYPLTFGQGTKEIKR 108
 Db 61 RFGSGSGTDTFTLTISLQPEDFATYTCQYHNYPLTFGQGTKEIKR 108

RESULT 12
 US-11-021-874-38
 Sequence 38, Application US/11021874
 Publication No. US20050163775A1
 GENERAL INFORMATION:
 APPLICANT: Andrew Chan
 APPLICANT: Qian Gong
 APPLICANT: Flavius Martin
 TITLE OF INVENTION: COMBINATION THERAPY FOR B CELL DISORDERS
 FILE REFERENCE: P2040R1P1
 CURRENT APPLICATION NUMBER: US/11/021,874
 CURRENT FILING DATE: 2004-12-22
 PRIOR APPLICATION NUMBER: US 10/861,049
 PRIOR FILING DATE: 2004-06-04
 PRIOR APPLICATION NUMBER: US 60/476,531
 PRIOR FILING DATE: 2003-06-06
 PRIOR APPLICATION NUMBER: US 60/476,481
 PRIOR FILING DATE: 2003-06-05
 PRIOR APPLICATION NUMBER: US 60/476,414
 PRIOR FILING DATE: 2003-06-05
 NUMBER OF SEQ ID NOS: 165
 SEQ ID NO 38
 LENGTH: 108
 TYPE: PRT
 ORGANISM: Homo sapiens
 US-11-021-874-38

Query Match 90.4%; Score 506; DB 6; Length 108;
 Best Local Similarity 89.8%; Pred. No. 1.2e-34;
 Matches 97; Conservative 6; Mismatches 5; Indels 0; Gaps 0;

Cy 1 DIQWTQSPSSLSASVGRVITTCRASKTISKYLAWYQKPKAPKLLIYSGSTLQSGVPS 60
 Db 1 DIQWTQSPSSLSASVGRVITTCRASKTISKYLAWYQKPKAPKLLIYSGSTLQSGVPS 60
 Cy 61 RFGSGSGTDTFTLTISLQPEDFATYTCQYHNYPLTFGQGTKEIKR 108
 Db 61 RFGSGSGTDTFTLTISLQPEDFATYTCQYHNYPLTFGQGTKEIKR 108

RESULT 13
 US-09-811-123-6
 Sequence 6, Application US/09811123
 Patent No. US20020001587A1
 GENERAL INFORMATION:
 APPLICANT: Sharon Erickson
 APPLICANT: Ralph Schwall

```
; APPLICANT: Mark Sliwkowski
; TITLE OF INVENTION: METHODS OF TREATMENT USING ANTI-ERBB
; FILE REFERENCE: GENENT.073A2
; CURRENT APPLICATION NUMBER: US/09/811,123
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: 60/238,327
; PRIOR FILING DATE: 2000-10-05
; PRIOR APPLICATION NUMBER: 09/602,530
; PRIOR FILING DATE: 2000-06-23
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 109
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Humanized Antibody Sequence
US-09-811-123-6

Query Match          90.4%; Score 506; DB 3; Length 109;
Best Local Similarity 89.8%; Pred. No. 1.2e-34; Indels 0; Gaps 0;
Matches 97; Conservative 6; Mismatches 5;

Qy 1 DIQWTQSPSSLSASVGDVRVITTCRAKTSISKYLAQQKPKAPKLLIYSGSTLQSGVPS 60
Db 1 DIQWTQSPSSLSASVGDVRVITTCRASQISINYLAWYQKPKAPKLLIYAASLSGVP 60

Qy 61 RFGSGSGTDFTLTITSLQPEDPATYTCQOHNEVPLTFGGTKVEIKR 108
Db 61 RFGSGSGTDFTLTITSLQPEDPATYTCQVNSLPWTFGGTKVEIKR 108

RESULT 14
US-10-044-896-4
; Sequence 4, Application US/10044896
; Publication No. US20030166228A1
; GENERAL INFORMATION:
; APPLICANT: Chuntharapai, Anan
; APPLICANT: Kim, Jin K.
; APPLICANT: Stewart, Timothy
; APPLICANT: Presta, Leonard G.
; TITLE OF INVENTION: ANTI-INTERFERON-ALPHA ANTIBODIES
; FILE REFERENCE: GENENT.074A
; CURRENT APPLICATION NUMBER: US/10/044,896
; CURRENT FILING DATE: 2002-01-09
; PRIOR APPLICATION NUMBER: 60/270775
; PRIOR FILING DATE: 2001-02-22
; NUMBER OF SEQ ID NOS: 14
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 110
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-044-896-4

Query Match          90.4%; Score 506; DB 4; Length 110;
Best Local Similarity 89.8%; Pred. No. 1.3e-34; Indels 0; Gaps 0;
Matches 97; Conservative 6; Mismatches 5;

Qy 1 DIQWTQSPSSLSASVGDVRVITTCRAKTSISKYLAQQKPKAPKLLIYSGSTLQSGVPS 60
Db 1 DIQWTQSPSSLSASVGDVRVITTCRASQISINYLAWYQKPKAPKLLIYAASLSGVP 60

Qy 61 RFGSGSGTDFTLTITSLQPEDPATYTCQOHNEVPLTFGGTKVEIKR 108
Db 61 RFGSGSGTDFTLTITSLQPEDPATYTCQVNSLPWTFGGTKVEIKR 108

RESULT 15
US-09-809-739-10
; Sequence 10, Application US/09809739
; Patent No. US20020106369A1
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; GENERAL INFORMATION:
; APPLICANT: Horvath, Christopher J.
; TITLE OF INVENTION: Method of Inhibiting Stenosis and
; FILE REFERENCE: 1855.1069-003
; CURRENT APPLICATION NUMBER: US/09/809,739
; CURRENT FILING DATE: 2001-03-15
; PRIOR APPLICATION NUMBER: US 09/528,267
; PRIOR FILING DATE: 2000-03-17
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10
; LENGTH: 127
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Humanized light chain variable region with signal
; NAME/KEY: SIGNAL
; LOCATION: (1)...(19)
US-09-809-739-10

Query Match          90.2%; Score 505; DB 3; Length 127;
Best Local Similarity 90.7%; Pred. No. 1.7e-34; Indels 0; Gaps 0;
Matches 98; Conservative 4; Mismatches 6;

Qy 1 DIQWTQSPSSLSASVGDVRVITTCRAKTSISKYLAQQKPKAPKLLIYSGSTLQSGVPS 60
Db 20 DIQWTQSPSSLSASVGDVRVITTCRASKSISINYLAWYQKPKAPKLLIYTGSTLRSGVPS 79

Qy 61 RFGSGSGTDFTLTITSLQPEDPATYTCQOHNEVPLTFGGTKVEIKR 108
Db 80 RFGSGSGTDFTLTITSLQPEDPATYTCQYERPLTFGGTKVEIKR 127

Search completed: April 13, 2006, 17:24:38
Job time : 107.114 secs
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GenCore version 5.1.7
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QM protein - protein search, using sw model

Run on: April 13, 2006, 17:19:00 ; Search time 31.5983 Seconds
(without alignments)
282.578 Million cell updates/sec

Title: US-10-727-737-2
Perfect score: 560
Sequence: 1 DIQMTQSPSSLSASVGRVT.....QQHNEYPLTTCGQTKVEIKR 108

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents_AA*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	560	100.0	108	2	US-08-974-899-2
2	560	100.0	108	2	US-09-795-798-2
3	546.5	97.6	109	2	US-09-027-449-47
4	546.5	97.6	109	2	US-08-804-444A-47
5	546.5	97.6	109	2	US-09-026-985-47
6	546.5	97.6	109	2	US-09-121-952A-47
7	546.5	97.6	109	2	US-09-234-340A-47
8	546.5	97.6	109	2	US-09-355-014-47
9	506	90.4	108	2	US-08-974-899-3
10	506	90.4	108	2	US-09-795-798-3
11	506	90.4	108	2	US-08-908-469-12
12	505	90.2	127	2	US-09-809-739-10
13	504	90.0	109	1	US-07-934-373C-3
14	504	90.0	109	2	US-08-437-642B-3
15	504	90.0	109	2	US-08-146-206C-3
16	504	90.0	109	2	US-09-705-686-3
17	504	90.0	109	2	US-09-705-392A-3
18	504	90.0	109	2	US-09-705-398-3
19	504	90.0	109	4	PCT-US93-07832-3
20	501	89.5	107	1	US-07-934-373C-18
21	501	89.5	107	2	US-08-437-642B-18
22	501	89.5	107	2	US-08-146-206C-18
23	501	89.5	107	2	US-09-648-067A-14
24	501	89.5	107	2	US-09-705-686-18
25	501	89.5	107	2	US-09-705-392A-18
26	501	89.5	107	2	US-09-705-398-18
27	501	89.5	107	2	US-09-602-812A-5

28	501	89.5	107	4	PCT-US93-07832-18
29	501	89.5	109	2	US-09-025-769B-28
30	501	89.5	109	2	US-09-025-769B-43
31	501	89.5	109	2	US-09-490-070A-28
32	501	89.5	109	2	US-09-490-070A-43
33	501	89.5	109	2	US-09-490-153-28
34	501	89.5	109	2	US-09-490-153-43
35	501	89.5	109	2	US-09-490-324-28
36	501	89.5	109	2	US-09-490-324-43
37	497	88.8	109	2	US-09-157-370-3
38	494	88.2	236	2	US-09-859-053-30
39	493	88.0	108	2	US-09-025-769B-14
40	493	88.0	108	2	US-09-490-070A-14
41	493	88.0	108	2	US-09-490-153-14
42	493	88.0	108	2	US-09-490-324-14
43	490	87.5	108	1	US-08-379-057-29
44	490	87.5	108	2	US-09-920-262A-8
45	490	87.5	240	2	US-09-192-854-2

ALIGNMENTS

RESULT 1
US-08-974-899-2
; Sequence 2, Application US/08974899
; Patent No. 6037454
; GENERAL INFORMATION:
; APPLICANT: Presta, Leonard G.
; APPLICANT: Jardieu, Paula M.
; TITLE OF INVENTION: Humanized Anti-CD11a Antibodies
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WinPatIn (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/974,899
; FILING DATE:
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/031971
; FILING DATE: 11/27/96
; ATTORNEY/AGENT INFORMATION:
; NAME: Lee, Wendy M.
; REGISTRATION NUMBER: 40,378
; REFERENCE/DOCKET NUMBER: P1014R1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-1994
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 108 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear
US-08-974-899-2

Query Match 100.0%; Score 560; DB 2; Length 108;
Best Local Similarity 100.0%; Pred. No. 7e-42;
Matches 108; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 DIQMTQSPSSLSASVGRVTITCRASKTISKYLAWYQOKPGKAPKLLIYSGSTLQSGVPS 60
Db 1 DIQMTQSPSSLSASVGRVTITCRASKTISKYLAWYQOKPGKAPKLLIYSGSTLQSGVPS 60

Qy 61 RFGSGSGTDTLTITISSLPEDFATYYCQOHNEYPITFGQGTKEIKR 108
 Db 61 RFGSGSGTDTLTITISSLPEDFATYYCQOHNEYPITFGQGTKEIKR 108

RESULT 2

US-09-795-798-2
 ; Sequence 2, Application US/09795798
 ; Patent No. 6703018
 ; GENERAL INFORMATION:
 ; APPLICANT: Presta, Leonard G.
 ; Jardieu, Paula M.
 ; TITLE OF INVENTION: Humanized Anti-CD11a Antibodies
 ; NUMBER OF SEQUENCES: 24
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Genentech, Inc.
 ; STREET: 1 DNA Way
 ; CITY: South San Francisco
 ; STATE: California
 ; COUNTRY: USA
 ; ZIP: 94080
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: WinPatIn (Genentech)
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/795,798
 ; FILING DATE: 28-Feb-2001
 ; CLASSIFICATION: <Unknown>
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: 08/974,899
 ; FILING DATE: <Unknown>
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Lee, Wendy M.
 ; REGISTRATION NUMBER: 40,378
 ; REFERENCE/DOCKET NUMBER: P1014R1
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 650/225-1994
 ; TELEFAX: 650/952-9881
 ; INFORMATION FOR SEQ ID NO: 2:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 108 amino acids
 ; TYPE: Amino Acid
 ; TOPOLOGY: Linear
 ; SEQUENCE DESCRIPTION: SEQ ID NO: 2:
 US-09-795-798-2

Query Match 100.0%; Score 560; DB 2; Length 108;
 Best Local Similarity 100.0%; Pred. No. 7e-42;
 Matches 108; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 DIQWTQSPSLASVGRVITTCRASTISKYLAWYQKPKAPKLLIYSGSTLQSGVPS 60
 Db 1 DIQWTQSPSLASVGRVITTCRASTISKYLAWYQKPKAPKLLIYSGSTLQSGVPS 60
 Qy 61 RFGSGSGTDTLTITISSLPEDFATYYCQOHNEYPITFGQGTKEIKR 108
 Db 61 RFGSGSGTDTLTITISSLPEDFATYYCQOHNEYPITFGQGTKEIKR 108

RESULT 3

US-09-027-449-47
 ; Sequence 47, Application US/09027449
 ; Patent No. 6025158
 ; GENERAL INFORMATION:
 ; APPLICANT: Gonzalez, Tania R.
 ; APPLICANT: Leong, Steven R.
 ; APPLICANT: Presta, Leonard G.
 ; TITLE OF INVENTION: Antibody Fragment-Polymer Conjugates and
 ; TITLE OF INVENTION: Humanized Anti-IL-8 Monoclonal Antibodies
 ; NUMBER OF SEQUENCES: 72
 ; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Genentech, Inc.
 ; STREET: 1 DNA Way
 ; CITY: South San Francisco
 ; STATE: California
 ; COUNTRY: USA
 ; ZIP: 94080
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: WinPatIn (Genentech)
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/027,449
 ; FILING DATE: 20-Feb-1998
 ; CLASSIFICATION: 435
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: 60/074,330
 ; FILING DATE: 22-Jan-1998
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: 60/038,664
 ; FILING DATE: 21-Feb-1997
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Love, Richard B.
 ; REGISTRATION NUMBER: 34,659
 ; REFERENCE/DOCKET NUMBER: P1085R3-2
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 650/225-5530
 ; TELEFAX: 650/952-9881
 ; INFORMATION FOR SEQ ID NO: 47:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 109 amino acids
 ; TYPE: Amino Acid
 ; TOPOLOGY: Linear
 ; US-09-027-449-47

Query Match 97.6%; Score 546.5; DB 2; Length 109;
 Best Local Similarity 98.2%; Pred. No. 1.1e-40;
 Matches 107; Conservative 1; Mismatches 0; Indels 1; Gaps 1;
 Qy 1 DIQWTQSPSLASVGRVITTCRASTISKYLAWYQKPKAPKLLI-YSGSTLQSGVP 59
 Db 1 DIQWTQSPSLASVGRVITTCRASTISKYLAWYQKPKAPKLLIYSGSTLQSGVP 60
 Qy 60 SRFGSGSGTDTLTITISSLPEDFATYYCQOHNEYPITFGQGTKEIKR 108
 Db 61 SRFGSGSGTDTLTITISSLPEDFATYYCQOHNEYPITFGQGTKEIKR 109

RESULT 4

US-08-804-444A-47
 ; Sequence 47, Application US/0880444A
 ; Patent No. 6117980
 ; GENERAL INFORMATION:
 ; APPLICANT: Gonzalez, Tania N
 ; APPLICANT: Leong, Steven R.
 ; APPLICANT: Presta, Leonard G.
 ; TITLE OF INVENTION: Humanized Anti-IL-8 Monoclonal Antibodies
 ; NUMBER OF SEQUENCES: 61
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Genentech, Inc.
 ; STREET: 1 DNA Way
 ; CITY: South San Francisco
 ; STATE: California
 ; COUNTRY: USA
 ; ZIP: 94080
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: WinPatIn (Genentech)
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/804,444A
 ; FILING DATE: 21-Feb-1997

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; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Love, Richard B.
; REGISTRATION NUMBER: 34,659
; REFERENCE/DOCKET NUMBER: P1085
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-5530
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 47:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 109 amino acids
; TYPE: Amino acid
; TOPOLOGY: Linear
; US-08-804-444A-47

Query Match          97.6%; Score 546.5; DB 2; Length 109;
Best Local Similarity 98.2%; Pred. No. 1.1e-40;
Matches 107; Conservative 1; Mismatches 0; Indels 1; Gaps 1;

Qy 1 DIQMTQSPSSLSASVGDRTVITCRASKTISKYLAWYQKPGKAPKLLI-YSGSTLQSGVP 59
Db 1 DIQMTQSPSSLSASVGDRTVITCRASKTISKYLAWYQKPGKAPKLLIYYSGSTLQSGVP 60

Qy 60 SRFGSGSGTDFTLTISSLPEDPATYTCQOHNEYPPLTFGGQTKVEIKR 108
Db 61 SRFGSGSGTDFTLTISSLPEDPATYTCQOHNEYPPLTFGGQTKVEIKR 109

RESULT 5
US-09-026-985-47
; Sequence 47, Application US/09026985
; Patent No. 6133426
; GENERAL INFORMATION:
; APPLICANT: Gonzalez, Tania R.
; APPLICANT: Leong, Steven R.
; APPLICANT: Presta, Leonard G.
; TITLE OF INVENTION: Antibody Fragment-Polymer Conjugates and
; TITLE OF INVENTION: Humanized Anti-IL-8 Monoclonal Antibodies
; NUMBER OF SEQUENCES: 72
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WinPatIn (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/026,985
; FILING DATE: 20-Feb-1998
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Love, Richard B.
; REGISTRATION NUMBER: 34,659
; REFERENCE/DOCKET NUMBER: P1085R3-1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-5530
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 47:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 109 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear
; US-09-026-985-47

Query Match          97.6%; Score 546.5; DB 2; Length 109;
Best Local Similarity 98.2%; Pred. No. 1.1e-40;
Matches 107; Conservative 1; Mismatches 0; Indels 1; Gaps 1;

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Qy 1 DIQMTQSPSSLSASVGDRTVITCRASKTISKYLAWYQKPGKAPKLLI-YSGSTLQSGVP 59
Db 1 DIQMTQSPSSLSASVGDRTVITCRASKTISKYLAWYQKPGKAPKLLIYYSGSTLQSGVP 60

Qy 60 SRFGSGSGTDFTLTISSLPEDPATYTCQOHNEYPPLTFGGQTKVEIKR 108
Db 61 SRFGSGSGTDFTLTISSLPEDPATYTCQOHNEYPPLTFGGQTKVEIKR 109

RESULT 6
US-09-121-952A-47
; Sequence 47, Application US/09121952A
; Patent No. 6458355
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc., Hsui, Vanessa
; APPLICANT: Koumenis, Iphigenia
; APPLICANT: Leong, Steven R.
; APPLICANT: Presta, Leonard G.
; APPLICANT: Shahrokh, Zahra
; APPLICANT: Zapata, Gerardo A.
; TITLE OF INVENTION: METHODS OF TREATING INFLAMMATORY DISEASES
; TITLE OF INVENTION: WITH ANTI-IL-8 ANTIBODY FRAGMENT-POLYMER CONJUGATES
; NUMBER OF SEQUENCES: 72
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WinPatIn (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/121,952A
; FILING DATE: 24-Jul-1998
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/074330
; FILING DATE: 22-JAN-1998
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/075467
; FILING DATE: 20-FEB-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Love, Richard B.
; REGISTRATION NUMBER: 34,659
; REFERENCE/DOCKET NUMBER: P1085R4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-5530
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 47:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 109 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear
; US-09-121-952A-47

Query Match          97.6%; Score 546.5; DB 2; Length 109;
Best Local Similarity 98.2%; Pred. No. 1.1e-40;
Matches 107; Conservative 1; Mismatches 0; Indels 1; Gaps 1;

Qy 1 DIQMTQSPSSLSASVGDRTVITCRASKTISKYLAWYQKPGKAPKLLI-YSGSTLQSGVP 59
Db 1 DIQMTQSPSSLSASVGDRTVITCRASKTISKYLAWYQKPGKAPKLLIYYSGSTLQSGVP 60

Qy 60 SRFGSGSGTDFTLTISSLPEDPATYTCQOHNEYPPLTFGGQTKVEIKR 108
Db 61 SRFGSGSGTDFTLTISSLPEDPATYTCQOHNEYPPLTFGGQTKVEIKR 109

RESULT 7

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1  Shahrokh, Zahra
2  Zapata, Gerardo A.
3  TITLE OF INVENTION: Antibody Fragment-Polymer Conjugates and
4  Humanized Anti-IL-8 Monoclonal Antibodies
5  NUMBER OF SEQUENCES: 72
6  CORRESPONDENCE ADDRESS:
7  ADDRESSEE: Genentech, Inc.
8  STREET: 1 DNA Way
9  CITY: South San Francisco
10 STATE: California
11 COUNTRY: USA
12 ZIP: 94080
13
14 COMPUTER READABLE FORM:
15 MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
16 COMPUTER: IBM PC compatible
17 OPERATING SYSTEM: PC-DOS/MS-DOS
18 SOFTWARE: WinPatIn (Genentech)
19
20 CURRENT APPLICATION DATA: US/09/355,014
21 APPLICATION NUMBER: US/09/355,014
22 FILING DATE: 21-Jul-1999
23 CLASSIFICATION: <Unknown>
24 ATTORNEY/AGENT INFORMATION:
25 NAME: Love, Richard B.
26 REGISTRATION NUMBER: 34,659
27 REFERENCE/DOCKET NUMBER: F1085R3PCT
28 TELECOMMUNICATION INFORMATION:
29 TELEPHONE: 650/225-5530
30 TELEFAX: 650/952-9881
31 INFORMATION FOR SEQ ID NO: 47:
32 SEQUENCE CHARACTERISTICS:
33 LENGTH: 109 amino acids
34 TYPE: Amino Acid
35 TOPOLOGY: Linear
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37 SEQUENCE DESCRIPTION: SEQ ID NO: 47:
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39 US-09-355-014-47
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41 Query Match 97.6%; Score 546.5; DB 2; Length 109;
42 Best Local Similarity 98.2%; Pred. No. 1.1e-40;
43 Matches 107; Conservative 1; Mismatches 0; Indels 1; Gaps 1;
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45 QY 1 DIQMTQSPSSLSASVGRVTITCRASKTISKYLAWYQQKPKAPKLLI-YSGSTLQSGVP 59
46 DB 1 DIQMTQSPSSLSASVGRVTITCRASKTISKYLAWYQQKPKAPKLLIYSGSTLQSGVP 60
47
48 QY 60 SRFSGSGSGTDFTLTSSIQPEDFATYYCOQHNEYPLTFGGQTKVEIKR 108
49 DB 61 SRFSGSGSGTDFTLTSSIQPEDFATYYCOQHNEYPLTFGGQTKVEIKR 109
50
51 RESULT 9
52 US-08-974-899-3
53 Sequence 3, Application US/08974899
54 Patent No. 6037454
55 GENERAL INFORMATION:
56 APPLICANT: Presta, Leonard G.
57 APPLICANT: Jardieu, Paula M.
58 TITLE OF INVENTION: Humanized Anti-CD11a Antibodies
59 NUMBER OF SEQUENCES: 24
60 CORRESPONDENCE ADDRESS:
61 ADDRESSEE: Genentech, Inc.
62 STREET: 1 DNA Way
63 CITY: South San Francisco
64 STATE: California
65 COUNTRY: USA
66 ZIP: 94080
67
68 COMPUTER READABLE FORM:
69 MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
70 COMPUTER: IBM PC compatible
71 OPERATING SYSTEM: PC-DOS/MS-DOS
72 SOFTWARE: WinPatIn (Genentech)
73 CURRENT APPLICATION DATA:
74 APPLICATION NUMBER: US/08/974,899
75 FILING DATE:

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; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/031971
; FILING DATE: 11/27/96
; ATTORNEY/AGENT INFORMATION:
; NAME: Lee, Wendy M.
; REGISTRATION NUMBER: 40,378
; REFERENCE/DOCKET NUMBER: P1014R1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-1994
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 108 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear
;
; US-08-974-899-3
;
; Query Match 90.4%; Score 506; DB 2; Length 108;
; Best Local Similarity 89.8%; Pred. NO. 3.6e-37;
; Matches 97; Conservative 6; Mismatches 5; Indels 0; Gaps 0;
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; Cy 1 DIQMTQSPSSLSASVGDRTVITTCRAKRTISKYLAWYQOKPKAKPLLIYSGSTLQSGVPS 60
; Db 1 DIQMTQSPSSLSASVGDRTVITTCRASQISNYLAWYQOKPKAKPLLIYAASSLESQVPS 60
;
; Qy 61 RFGSGSGGTDFTLTISISLPQEDPATYYCQHNEYPLTFGQGTQKVEIKR 108
; Db 61 RFGSGSGGTDFTLTISISLPQEDPATYYCQYNSLPWFQGTQKVEIKR 108
;
; RESULT 10
; US-09-795-798-3
; Sequence 3, Application US/09795798
; Patent No. 6703018
; GENERAL INFORMATION:
; APPLICANT: Presta, Leonard G.
; ; Jardieu, Paula M.
; TITLE OF INVENTION: Humanized Anti-CD11a Antibodies
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WinPatIn (Genentech)
;
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/795,798
; FILING DATE: 28-Feb-2001
; CLASSIFICATION: <Unknown>
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/974,899
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Lee, Wendy M.
; REGISTRATION NUMBER: 40,378
; REFERENCE/DOCKET NUMBER: P1014R1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-1994
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 108 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear
;
; SEQUENCE DESCRIPTION: SEQ ID NO: 3:
;
; US-09-795-798-3

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; TOPOLOGY: Linear
US-08-437-642B-3
Query Match          90.0%; Score 504; DB 2; Length 109;
Best Local Similarity 88.9%; Pred. No. 5.4e-37;
Matches 96; Conservative 6; Mismatches 6; Indels 0; Gaps 0;

Qy 1 DIQMTQSPSSLSASVGRVTITCRASKTISKYLAWYQKPKAPKLLIYSGSTLQSGVPS 60
Db 1 DIQMTQSPSSLSASVGRVTITCRASQDVSSYLAWYQKPKAPKLLIYAASLSGVS 60

Qy 61 RFGSGSGTDFLTITSSLPQEDFATYCCQHNVEPLTFGQGTKEIKR 108
Db 61 RFGSGSGTDFLTITSSLPQEDFATYCCQHNVEPLTFGQGTKEIKR 108

RESULT 15
US-08-146-206C-3
; Sequence 3, Application US/08146206C
; Patent No. 6407213
; GENERAL INFORMATION:
; APPLICANT: Carter, Paul J.
; APPLICANT: Presta, Leonard G.
; TITLE OF INVENTION: Method for Making Humanized Antibodies
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WinPatIn (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/146,206C
; FILING DATE: 17-No. 6407213-1993
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/715272
; FILING DATE: 14-JUN-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Lee, Wendy M.
; REGISTRATION NUMBER: 40,378
; REFERENCE/DOCKET NUMBER: P0709P1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-1994
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 109 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear
US-08-146-206C-3
Query Match          90.0%; Score 504; DB 2; Length 109;
Best Local Similarity 88.9%; Pred. No. 5.4e-37;
Matches 96; Conservative 6; Mismatches 6; Indels 0; Gaps 0;

Qy 1 DIQMTQSPSSLSASVGRVTITCRASKTISKYLAWYQKPKAPKLLIYSGSTLQSGVPS 60
Db 1 DIQMTQSPSSLSASVGRVTITCRASQDVSSYLAWYQKPKAPKLLIYAASLSGVS 60

Qy 61 RFGSGSGTDFLTITSSLPQEDFATYCCQHNVEPLTFGQGTKEIKR 108
Db 61 RFGSGSGTDFLTITSSLPQEDFATYCCQHNVEPLTFGQGTKEIKR 108

Search completed: April 13, 2006, 17:20:47
Job time : 32.5983 secs

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GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioacceleration Ltd.

OM protein - protein search, using sw model

Run on: April 13, 2006, 17:05:54 ; Search time 140.07 Seconds

(without alignments)
543.993 Million cell updates/sec

Title: US-10-727-737-2

Perfect score: 560

Sequence: 1 DIQMTQSPSSLSASVGRVT.....QQHNEYPLTFQGQTKVETKR 108

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 2166443 seqs, 705528306 residues

Total number of hits satisfying chosen parameters: 2166443

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : UniProt_05.80.*

1: uniprot_sprot.*

2: uniprot_trembl.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB	ID	Description
1	486	86.8	236	2	Q6GMX8 HUMAN	Q6gmX8 homo sapien
2	481	85.9	108	1	KV1K HUMAN	P04430 homo sapien
3	481	85.9	236	2	Q7Z3Y4 HUMAN	Q7z3Y4 homo sapien
4	479	85.5	108	2	Q9UL70 HUMAN	Q9ul70 homo sapien
5	479	85.5	236	2	Q6GMX9 HUMAN	Q6gmX9 homo sapien
6	478	85.4	236	2	Q6PIH7 HUMAN	Q6piH7 homo sapien
7	476	85.0	236	2	Q6GMW1 HUMAN	Q6gmW1 homo sapien
8	475	84.8	108	1	Q9UL77 HUMAN	Q9ul77 homo sapien
9	474	84.6	108	1	KV1H HUMAN	P01600 homo sapien
10	473.5	84.6	107	2	Q96SA9 HUMAN	Q96sa9 homo sapien
11	471	84.1	236	2	Q502W4 HUMAN	Q502w4 homo sapien
12	471	84.1	244	2	Q5ZC8 HUMAN	Q5zC8 homo sapien
13	470	83.9	240	2	Q5ZC9 HUMAN	Q5zC9 homo sapien
14	464	82.9	108	1	KV1M HUMAN	P01605 homo sapien
15	463	82.7	234	2	Q7Z473 HUMAN	Q7z473 homo sapien
16	463	82.7	236	2	Q6GMX0 HUMAN	Q6gmX0 homo sapien
17	462	82.5	108	2	Q9UL79 HUMAN	Q9ul79 homo sapien
18	461	82.3	108	1	KV1G HUMAN	P01599 homo sapien
19	461	82.3	108	1	KV1L HUMAN	P01604 homo sapien
20	460	82.1	108	1	KV1S HUMAN	P01611 homo sapien
21	459.5	81.9	107	1	KV1D HUMAN	P01596 homo sapien
22	458	81.8	108	1	KV1B HUMAN	P01594 homo sapien
23	458	81.8	129	1	KV1W HUMAN	P04431 homo sapien
24	456	81.4	236	2	Q6PI75 HUMAN	Q6pi75 homo sapien
25	455	81.2	108	1	KV1F HUMAN	P01598 homo sapien
26	455	81.2	108	1	KV1O HUMAN	P01607 homo sapien
27	455	81.2	108	1	KV1R HUMAN	P01610 homo sapien
28	452	80.7	108	1	KV1N HUMAN	P01606 homo sapien
29	452	80.7	108	1	KV1P HUMAN	P01608 homo sapien
30	452	80.7	108	1	KV1Y HUMAN	P03362 homo sapien
31	451.5	80.6	107	2	Q9UL81 HUMAN	Q9ul81 homo sapien

32	450	80.4	108	1	KV1K HUMAN	P01603 homo sapien
33	449	80.2	236	2	Q6PIH4 HUMAN	Q6piH4 homo sapien
34	447	79.8	108	1	KV1E HUMAN	P01597 homo sapien
35	447	79.8	108	1	KV1Q HUMAN	P01609 homo sapien
36	443	79.1	234	2	Q5EFE6 HUMAN	Q5efe6 homo sapien
37	442	78.9	189	2	Q56917 HUMAN	Q56917 homo sapien
38	442	78.4	108	1	KV1A HUMAN	P01593 homo sapien
39	434	77.5	129	1	KV1X HUMAN	P04432 homo sapien
40	432	77.1	117	1	KV1J HUMAN	P01602 homo sapien
41	431	77.0	117	1	KV1I HUMAN	P01601 homo sapien
42	430	76.8	108	1	KV1C HUMAN	P01595 homo sapien
43	428	76.4	116	2	Q6PPE6 HUMAN	Q6ppe6 homo sapien
44	423.5	75.6	109	1	KV1T HUMAN	P01612 homo sapien
45	412	73.6	108	1	KV5D_MOUSE	P01636 mus musculus

ALIGNMENTS

RESULT 1

Q6GMX8_HUMAN	PRELIMINARY;	PRT;	236 AA.
ID	Q6GMX8_HUMAN		
AC	Q6GMX8;		
DT	05-JUL-2004 (TRENBLrel. 27, Created)		
DT	05-JUL-2004 (TRENBLrel. 27, Last sequence update)		
DT	05-JUL-2004 (TRENBLrel. 27, Last annotation update)		
DE	IGKC protein.		
OS	Name=IGKC;		
GN	Homo sapiens (Human)		
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;		
OC	Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;		
OC	Homo.		
OX	NCBI_TaxID=9606;		
RN	[1]		
RP	NUCLEOTIDE SEQUENCE.		
RC	TISSUE=Primary B-Cells;		
EX	MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;		
RA	Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,		
RA	Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,		
RA	Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,		
RA	Hopkins R.P., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,		
RA	Datchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,		
RA	Stapleton M., Soares M.B., Bonaldo M.P., Casavant T.L., Scheetz T.E.,		
RA	Brownstein M.J., Udgin T.B., Toshiyuki S., Carninci P., Frange C.,		
RA	Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,		
RA	Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,		
RA	Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,		
RA	Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,		
RA	Faney J., Helton E., Kettelman M., Madan A., Rodrigues S., Sanchez A.,		
RA	Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,		
RA	Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,		
RA	Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smalusz D.E.,		
RA	Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;		
RT	"Generation and initial analysis of more than 15,000 full-length human		
RL	and mouse cDNA sequences."		
RN	Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).		
RP	[2]		
RC	NUCLEOTIDE SEQUENCE.		
RG	NIH MGC Project;		
RL	Submitted (JUN-2004) to the EMBL/GenBank/DBJ databases.		
DR	EMBL; BC073764; AAH73764.1; -; mRNA.		
DR	SMR; Q6GMX8; 24-235.		
DR	Ensembl; ENSG00000163245; Homo sapiens.		
DR	InterPro; IPR003599; IG.		
DR	InterPro; IPR007110; IG-like.		
DR	InterPro; IPR003597; IG.cl.		
DR	InterPro; IPR003006; IG.MHC.		
DR	InterPro; IPR003596; IG.v.		
DR	Pfam; PF07654; CI-set; 1.		
DR	SMART; SM00409; IG; 2.		
DR	SMART; SM00407; IGcl; 1.		

Db 83 KPSGSGTGDTLTITSSLOPEDPATYCCQYKSPVTFQGTGKLEIKR 130

RESULT 4

Q9UL70 HUMAN

ID Q9UL70_HUMAN PRELIMINARY; PRT; 108 AA.

AC Q9UL70_

DE 01-MAY-2000 (TREMBLrel. 13, Created)

DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)

DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)

DE Myosin-reactive immunoglobulin light chain variable region (Fragment).

DE OS Homo sapiens (Human).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae; CC NCBI

CC NCBI_TaxID=9606;

EN [1]

EP NUCLEOTIDE SEQUENCE.

EX MEDLINE=98277139; PubMed=9614934; DOI=10.1006/clin.1998.4531; EA Wu X., Liu B., Van der Merwe P.L., Kalis N.N., Berney S.M., EA Young D.C.;

ET "Myosin-reactive autoantibodies in rheumatic carditis and normal fetus";

ET Clin. Immunol. Immunopathol. 87:184-192(1998).

RN [2]

RP NUCLEOTIDE SEQUENCE.

RA PubMed=1660528;

RA Manheimer-Lory A., Katz J.B., Pillinger M., Ghossein C., Smith A., RA Diamond B.;

RT "Molecular characteristics of antibodies bearing an anti-DNA-associated idiotype";

RL J. Exp. Med. 174:1639-1652(1991).

RL EMBL; AF035044; AAD56280.1; -; mRNA.

DR PIR; PH0863; PH0863.

DR HSP; P01607; 1BMW.

DR SMR; Q9UL70; 1-108.

DR InterPro; IPR007110; Ig-like.

DR InterPro; IPR003596; Ig_v.

DR SMART; SM00406; IGV; 1.

DR PROSITE; PS00835; IG LIKE; 1.

FT NON_TER 1

FT NON_TER 108

SQ SEQUENCE 108 AA; 11633 MW; B7BEDC3E41FCCA37 CRC64;

Query Match 85.5%; Score 479; DB 2; Length 108;

Best Local Similarity 86.1%; Pred. No. 4e-41;

Matches 93; Conservative 5; Mismatches 10; Indels 0; Gaps 0;

QY 1 DIQMTQSPSSLSASVGDRTVITCRASKTISKYLAQQKPGKAPKLLIYSGTQSGVPS 60

Db 1 DIQMTQSPSSLSASVGDRTVITCRASQGISNLYLAQQKPGKPKSLIYAASLTQSGVPS 60

QY 61 RPSGSGGTDFLTITSSLOPEDPATYCCQYKSPVTFQGTGKLEIKR 108

Db 61 RPSGSGGTDFLTITSSLOPEDPATYCCQYKSPVTFQGTGKLEIKR 108

RESULT 5

Q6GKX9 HUMAN

ID Q6GKX9_HUMAN PRELIMINARY; PRT; 236 AA.

AC Q6GKX9;

DT 05-JUL-2004 (TREMBLrel. 27, Created)

DT 05-JUL-2004 (TREMBLrel. 27, Last sequence update)

DT 05-JUL-2004 (TREMBLrel. 27, Last annotation update)

DE IGKC protein.

GN Name=IGKC;

OS Homo sapiens (Human).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae; CC NCBI

CC NCBI_TaxID=9606;

RN [1]

RP NUCLEOTIDE SEQUENCE.

RC TISSUE=Primary B-Cells;

RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;

RA Strausberg R.L., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D., RA Klausner R.D., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K., RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Heide F., RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E., RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C., RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J., RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H., RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W., RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., RA Fahy J., Helton E., Kettman M., Madan A.C., Rodrigues S., Sanchez A., RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E., RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;

RT "Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences";

RT Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).

RN [2]

RP NUCLEOTIDE SEQUENCE.

RC TISSUE=Primary B-Cells;

RG NIH MGC Project;

RL Submitted (JUN-2004) to the EMBL/GenBank/DBJ databases.

RL EMBL; BC073763; AAH73763.1; -; mRNA.

DR SMR; Q6GKX9; 23-236.

DR Ensembl; ENSG00000163245; Homo sapiens.

DR InterPro; IPR003599; Ig.

DR InterPro; IPR007110; Ig-like.

DR InterPro; IPR003597; Ig c1.

DR InterPro; IPR003006; Ig MHC.

DR InterPro; IPR003596; Ig_v.

DR Pfam; PF07654; CI-set; 1.

DR SMART; SM00409; IG; 2.

DR SMART; SM00407; IGC1; 1.

DR SMART; SM00406; IGV; 1.

DR PROSITE; PS00835; IG LIKE; 2.

DR PROSITE; PS00290; IG MHC; UNKNOWN 1.

SQ SEQUENCE 236 AA; 25924 MW; FDE2093DC560CF77 CRC64;

Query Match 85.5%; Score 479; DB 2; Length 236;

Best Local Similarity 85.2%; Pred. No. 9.9e-41;

Matches 92; Conservative 8; Mismatches 8; Indels 0; Gaps 0;

QY 1 DIQMTQSPSSLSASVGDRTVITCRASKTISKYLAQQKPGKAPKLLIYSGTQSGVPS 60

Db 23 DIQMTQSPSSLSASVGHRTVITCRASQNSVRWLAQQKPEKAPKSLIYATSLHSGVPS 82

QY 61 RPSGSGGTDFLTITSSLOPEDPATYCCQYKSPVTFQGTGKLEIKR 108

Db 83 RPSGSGGTDFLTITSSLOPEDPATYCCQYKSPVTFQGTGKLEIKR 130

RESULT 6

Q6PIH7 HUMAN

ID Q6PIH7_HUMAN PRELIMINARY; PRT; 236 AA.

AC Q6PIH7;

DT 05-JUL-2004 (TREMBLrel. 27, Created)

DT 05-JUL-2004 (TREMBLrel. 27, Last sequence update)

DT 05-JUL-2004 (TREMBLrel. 27, Last annotation update)

DE IGKC protein.

GN Name=IGKC;

OS Homo sapiens (Human).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae; CC NCBI

CC NCBI_TaxID=9606;

RN [1]

RP NUCLEOTIDE SEQUENCE.

RA Wagner S.D., Luzzatto L.;
 RT "V kappa gene segments rearranged in chronic lymphocytic leukemia are
 RT distributed over a large portion of the V kappa locus and do not show
 RT somatic mutation."; [4]
 RL Eur. J. Immunol. 23:391-397(1993).
 RN [4]
 RP NUCLEOTIDE SEQUENCE.
 RX PubMed=1660528;
 RA Diamond B.;
 RA "Molecular characteristics of antibodies bearing an anti-DNA-
 RT associated idiotype."; [5]
 RL J. Exp. Med. 174:1639-1652(1991).
 RN [5]
 RP NUCLEOTIDE SEQUENCE.
 RX PubMed=1903706;
 RA Blaisson G., Kuntz J.L., Pasquali J.L.;
 RT "Molecular analysis of V kappa III variable regions of polyclonal
 RT rheumatoid factors during rheumatoid arthritis."; [5]
 RL Eur. J. Immunol. 21:1221-1227(1991).
 DR EMBL; U96396; AAB68785.1; -; mRNA.
 DR PIR; B49047; B49047.
 DR PIR; PH0867; PH0867.
 DR PIR; S16840; S16840.
 DR PIR; S31977; S31977.
 DR PIR; S34083; S34083.
 DR PIR; S34086; S34086.
 DR HSP; P01607; 1EW.
 DR SMR; Q96SA9; 1-107.
 DR InterPro; IPR007110; Ig-like.
 DR InterPro; IPR003596; Ig_v.
 DR SMART; SM00406; IGV; 1.
 DR PROSITE; PS50835; IG_LIKE; 1.
 FT NON_TER 1 107
 FT TER 107 107
 SQ SEQUENCE 107 AA; 11520 MW; 4BB43E9C5B577F16 CRC64;
 Query Match 84.6%; Score 473.5; DB 2; Length 107;
 Best Local Similarity 88.0%; Pred. No. 1.5e-40;
 Matches 95; Conservative 5; Mismatches 7; Indels 1; Gaps 1;
 Qy 1 DIQWTFSSLSASVGRVITTCRASKTISKYLAWYQKPKAPKLLIYSGSTLSQGVPS 60
 Db 1 DIQWTFSSLSASVGRVITTCRASKTISKYLAWYQKPKAPKLLIYSGSTLSQGVPS 60
 Qy 61 RPSGSGSGTPTLTISLQPEDFATYCCQHNEYPFTFGGQTKVEIKR 108
 Db 61 RPSGSGSGTPTLTISLQPEDFATYCCQHNEYPFTFGGQTKVEIKR 107
 RESULT 11
 Q502W4_HUMAN
 ID Q502W4_HUMAN PRELIMINARY; PRT; 236 AA.
 AC Q502W4;
 DT 13-SEP-2005 (TrEMBLrel. 31, Created)
 DT 13-SEP-2005 (TrEMBLrel. 31, Last sequence update)
 DT 13-SEP-2005 (TrEMBLrel. 31, Last annotation update)
 DE IGKC protein.
 GN Name=IGKC;
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
 OC Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP NUCLEOTIDE SEQUENCE.
 RC TISSUE=Glandular pool- thyroid;
 RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
 RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
 RA Klausner R.D., Collins P.S., Wagner L., Shenmen C.M., Schuler G.D.,
 RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
 RA Hopkins R.F., Jordan A., Moore T., Max S.I., Wang J., Haiech F.,
 RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
 RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
 RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
 RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
 RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
 RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
 RA Fahy J., Helton E., Kettman M., Madan A., Rodrigues S., Sanchez A.,
 RA Whiting M., Madan A., Young A.C., Shevchenko V., Bouffard G.G.,
 RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
 RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
 RA Butterfield J.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
 RA Schnerch A., Schein J.B., Jones S.J.M., Marra M.A.;
 RT "Generation and initial analysis of more than 15,000 full-length human
 RT and mouse cDNA sequences."; [2]
 RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
 RN [2]
 RP NUCLEOTIDE SEQUENCE.
 RC TISSUE=Glandular pool- thyroid;
 RG NIH MGC Project;
 RL Submitted (MAY-2005) to the EMBL/GenBank/DBJ databases.
 DR EMBL; BC095489; AAH95489.1; -; mRNA.
 DR SMR; Q502W4; 23-236.
 DR Ensembl; ENSG00000163245; Homo sapiens.
 DR InterPro; IPR003599; Ig.
 DR InterPro; IPR007110; Ig-like.
 DR InterPro; IPR003597; Ig_c1.
 DR InterPro; IPR003006; Ig_MHC.
 DR InterPro; IPR003596; Ig_v.
 DR Pfam; PF07654; Cl-set; 1.
 DR SMART; SM00409; IG; 2.
 DR SMART; SM00406; IGV; 1.
 DR PROSITE; PS50835; IG_LIKE; 2.
 DR PROSITE; PS00290; IG_MHC; UNKNOWN 1.
 SQ SEQUENCE 236 AA; 25936 MW; E2DF79AC18756AA9 CRC64;
 Query Match 84.1%; Score 471; DB 2; Length 236;
 Best Local Similarity 84.3%; Pred. No. 6.6e-40;
 Matches 91; Conservative 7; Mismatches 10; Indels 0; Gaps 0;
 Qy 1 DIQWTFSSLSASVGRVITTCRASKTISKYLAWYQKPKAPKLLIYSGSTLSQGVPS 60
 Db 23 DIQWTFSSLSASVGRVITTCRASKTISKYLAWYQKPKAPKLLIYSGSTLSQGVPS 82
 Qy 61 RPSGSGSGTPTLTISLQPEDFATYCCQHNEYPFTFGGQTKVEIKR 108
 Db 83 RPSGSGSGTPTLTISLQPEDFATYCCQHNEYPFTFGGQTKVEIKR 130
 RESULT 12
 Q65ZC8_HUMAN
 ID Q65ZC8_HUMAN PRELIMINARY; PRT; 244 AA.
 AC Q65ZC8;
 DT 25-OCT-2004 (TrEMBLrel. 28, Created)
 DT 25-OCT-2004 (TrEMBLrel. 28, Last sequence update)
 DT 25-OCT-2004 (TrEMBLrel. 28, Last annotation update)
 DE Single-chain Fv (Fragment).
 GN Name=scFv;
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
 OC Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP NUCLEOTIDE SEQUENCE.
 RX MEDLINE=97362799; PubMed=9219263; DOI=10.1038/nbt0797-629;
 RA Kontermann R.E., Wing M.G., Winter G.;
 RT "Complement recruitment using bispecific diabodies."; [1]
 RL Nat. Biotechnol. 15:629-631(1997).
 DR EMBL; Y13057; CAA73500.1; -; mRNA.
 DR InterPro; IPR003599; Ig.
 DR InterPro; IPR007110; Ig-like.
 DR InterPro; IPR003596; Ig_v.


```

RESULT 15
Q72473 HUMAN
ID Q72473 HUMAN PRELIMINARY; PRT; 234 AA.
AC Q72473;
DT 01-OCT-2003 (TrEMBLrel. 25, Created)
DT 01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE IGKC protein.
GN Name=IGKC;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
OC Homo.
OX NCBI_TaxID=9606;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RC TISSUE=Lung;
RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Datchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Scapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Udén T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Boeak S.A., McGowan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RA Scherch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
and mouse cDNA sequences."
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN [2]
RP NUCLEOTIDE SEQUENCE.
RC TISSUE=Lung;
RG NIH MGC Project;
RL Submitted (AUG-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; BC056256; AAH56256.1; -; mRNA.
DR HSP; P01834; 1HEZ.
DR SMR; Q72473; 22-234.
DR Ensembl; ENSG00000163245; Homo sapiens.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003597; Ig_C1.
DR InterPro; IPR003006; Ig_MHC.
DR InterPro; IPR003596; Ig_v.
DR Pfam; PF07654; C1-set; 1.
DR SMART; SM00406; IGv; 1.
DR PROSITE; PS50835; IG_LIKE; 2.
DR PROSITE; PS00290; IG_MHC; UNKNOWN_1.
KW Immunoglobulin domain.
SQ SEQUENCE 234 AA; 25674 MW; 1A2C259BAB51BC0F CRC64;

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Query Match      82.7%; Score 463; DB 2; Length 234;
Best Local Similarity 83.2%; Pred. No. 4.3e-39;
Matches 89; Conservative 7; Mismatches 11; Indels 0; Gaps 0;

QY      2 IQWTQSPSSLASVGDVRVTITCRASKTISKYLAWYQKPKAPKLLIYSGSTLQSGVPSR 61
Db      |::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|
      22 IRMTQSPSSFASASTGDRVTITCRASIGSYLAWYQKPKAPOLLIIYAATLQSGVPSR 81
QY      62 FSGSGSGTDFLTITSSLPQDFATFYCQHNNEPLTFGGQTKVEIKR 108
Db      |||||::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|
      82 FSGSASGTDFLTLSISCLQSDPATFYCQYYTYPTWTFGGQTKVEIKR 128

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Search completed: April 13, 2006, 17:18:41
Job time : 141.07 secs

GenCore version 5.1.7
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OM protein - protein search, using sw model

Run on: April 13, 2006, 17:14:06 ; Search time 23.1092 Seconds
(without alignments)
449.666 Million cell updates/sec

Title: US-10-727-737-2
Perfect score: 560
Sequence: 1 DIQMTQSPSSLSASVGRVT.....QQHNEYPLTFGQGTKVEIKR 108

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR_80.*
1: pir1.*
2: pir2.*
3: pir3.*
4: pir4.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	493	88.0	125	2 S40333	Ig kappa chain V-J
2	490	87.5	108	2 B49047	Ig kappa chain V r
3	490	87.5	129	2 S40369	Ig kappa chain - h
4	489	87.3	117	2 S46371	Ig kappa chain V-J
5	487	87.0	125	2 S40349	Ig kappa chain V-J
6	487	87.0	127	2 S40367	Ig kappa chain V-J
7	486	86.8	108	2 S19674	Ig kappa chain V r
8	486	86.8	123	2 S40331	Ig kappa chain - h
9	485	86.8	131	2 S40352	Ig kappa chain V-J
10	484.5	86.5	124	2 S40336	Ig kappa chain V-J
11	483	86.2	107	2 S36264	Ig lambda chain V
12	483	86.2	132	2 S40334	Ig kappa chain - h
13	481	85.9	108	1 KIHURN	Ig kappa chain V-I
14	479	85.5	128	2 S46372	Ig light chain var
15	478	85.4	107	2 I69017	anti-HIV1 envelope
16	476.5	85.1	107	2 S36275	Ig lambda chain V
17	476	85.0	117	2 S46376	Ig kappa chain V-J
18	474	84.6	108	1 KIHURU	Ig kappa chain V-I
19	474	84.6	108	2 S36277	Ig lambda chain V
20	474	84.6	132	2 S38646	Ig kappa chain V r
21	473	84.5	106	2 S26345	Ig light chain V r
22	473	84.5	109	2 S31998	Ig kappa chain - h
23	473	84.5	125	2 S40353	Ig kappa chain V-J
24	473	84.5	127	2 S04574	Ig kappa chain pre
25	472	84.3	108	2 S44132	Ig kappa chain V r
26	471	84.1	124	2 S40318	Ig kappa chain V r
27	469	83.8	125	2 S40316	Ig kappa chain - h
28	467.5	83.5	108	2 S30521	Ig kappa chain V r
29	466	83.2	108	2 S36279	Ig lambda chain V

30	466	83.2	108	2 S47182	Ig kappa chain - h
31	465	83.0	109	2 S31981	Ig kappa chain - h
32	465	83.0	129	2 S52793	Ig kappa chain V r
33	464	82.9	107	2 S36269	Ig lambda chain V
34	464	82.9	108	1 KIHULY	Ig kappa chain V-I
35	463.5	82.8	108	2 S34007	Ig kappa chain V r
36	462.5	82.6	107	2 S47183	Ig kappa chain - h
37	462	82.5	122	2 S40370	Ig kappa chain - h
38	462	82.5	125	2 S40350	Ig kappa chain - h
39	462	82.5	127	2 S11240	Ig kappa chain V r
40	461	82.3	108	1 KIHUGL	Ig kappa chain V-I
41	461	82.3	108	1 KIHUKU	Ig kappa chain V-I
42	461	82.3	129	2 S52789	Ig kappa chain V r
43	460	82.1	108	1 KIHUMS	Ig kappa chain V-I
44	460	82.1	108	2 I39154	Ig kappa chain (BR
45	460	82.1	120	2 S46370	Ig kappa chain V-J

ALIGNMENTS

RESULT 1
S40333
Ig kappa chain V-J region - human
C;Species: Homo sapiens (man)
C;Date: 19-May-1994 #sequence_revision 26-May-1995 #text_change 21-Jan-2000
C;Accession: S40333
R;Klein, R.; Jaenichen, R.; Zachau, H.G.
Eur. J. Immunol. 23, 3248-3271, 1993
A;Title: Expressed human immunoglobulin chi genes and their hypermutation.
A;Reference number: S40312; MUID:94080891; PMID:8258341
A;Accession: S40333
A;Status: Preliminary; translation not shown
A;Molecule type: mRNA
A;Residues: 1-125 <KLE>
A;Cross-references: UNIPARC:UPI0000116153; EMBL:X72443; NID:9441354; PIDN:CAAS1111.1; PII
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: heterotetramer; immunoglobulin
F;34-108/Domain: immunoglobulin homology <IMM>

Query Match 88.0%; Score 493; DB 2; Length 125;
Best Local Similarity 86.9%; Pred. No. 3.2e-34;
Matches 93; Conservative 9; Mismatches 5; Indels 0; Gaps 0;

Qy	1	DIQMTQSPSSLSASVGRVTITCRASVTISKYLAWYQKPGKAPKLLIYSGTSGVPS	60
Db	19	DIQMTQSPSTLSASVGRVTITCRASQSISSWLAWYQKPGKAPKLLIYKASSLSGVPS	78
Qy	61	RFSGSGGTDTLTITSSLOPEDATYTCQOHNEYPLTFGQGTKVEIK	107
Db	79	RFSGSGGTETFLTITSSLPDDFATYTCQYNSYPWTFTGQGTKVEIK	125

RESULT 2

B49047
Ig kappa chain V region (monoclonal striational autoantibody StrAB SA-1A) - human (fragme
C;Species: Homo sapiens (man)
C;Date: 19-Dec-1993 #sequence_revision 18-Nov-1994 #text_change 09-Jul-2004
C;Accession: B49047
R;Victor, K.D.; Pascual, V.; Williams, C.L.; Lennon, V.A.; Capra, J.D.
Eur. J. Immunol. 22, 2231-2236, 1992
A;Title: Human monoclonal striational autoantibodies isolated from thymic B lymphocytes
A;Reference number: A49047; MUID:92387224; PMID:1516616
A;Accession: B49047
A;Status: Preliminary
A;Molecule type: nucleic acid
A;Residues: 1-108 <VIC>
A;Cross-references: UNIPROT:Q96SA9; UNIPROT:Q9UL77; UNIPARC:UPI0000176B44
A;Experimental source: thymic B lymphocytes
A;Note: sequence extracted from NCBI backbone (NCBIN:113208, NCBIIP:113209)
C;Superfamily: immunoglobulin V region; immunoglobulin homology
F;16-90/Domain: immunoglobulin homology <IMM>

R;Marks, J.D.; Hoogenboom, H.R.; Bonnert, T.P.; McCafferty, J.; Griffiths, A.D.; Winter, J. Mol. Biol. 222, 581-597, 1991

A>Title: By-passing immunization. Human antibodies from V-gene libraries displayed on phage

A;Reference number: S19663; MUID:92085276; PMID:1748994

A;Accession: S19674

A:Molecule type: mRNA

A;Residues: 1-108 <VAR>

A;Cross-references: UNIPARC:UPI0000115FEI; EMBL:X61642; NID:g37860; PIDN:CAA43823.1; PID:CAAA43823.1

C;Superfamily: immunoglobulin V region; immunoglobulin homology

C;Keywords: heterotetramer; immunoglobulin

F;16-90/Domain: immunoglobulin homology <IMM>

Query Match 86.8%; Score 486; DB 2; Length 108;
Best Local Similarity 86.1%; Pred. No. 1.1e-33;
Matches 93; Conservative

Mismatches 7; Indels 0; Gaps 0;

Cy 1 DIQMTQSPSSLASVSGDRVTITCRASKTISKYLAWYQQKPKAPKLLIYGSTLTQSGLGPS 60
:-:|||||:
Db 1 ELIVLTQSPSSLASVSGDRVTITCRASGISNYLNWYQQKPKAPKLLIYAASLTQSGLGPS 60
:-:|||||:
Qy 61 RPSGSGSGDTFTLTISLQPEDPATYYCQHNEYPPLTFGGGTKEIKR 108
|||||||:-:|||||:
Db 61 RPSGSGSGDTFTLTISLQPEDPATYYCQHNEYPPLTFGGGTKEIKR 108
|||||||:-:|||||:

RESULT 8

S40331

Ig kappa chain - human

C;Species: Homo sapiens (man)

C;Date: 06-Mar-1994 #sequence_revision 26-May-1995 #text_change 21-Jan-2000

C;Accession: S40331

R;Klein, R.; Jaenichen, R.; Zachau, H.G.

Eur. J. Immunol. 23, 3248-3271, 1993

A>Title: Expressed human immunoglobulin chi genes and their hypermutation.

A;Reference number: S40312; MUID:94080891; PMID:8258341

A;Accession: S40331

A;Status: preliminary; translation not shown

A:Molecule type: mRNA

A;Residues: 1-123 <KLE>

A;Cross-references: UNIPARC:UPI0000116151; EMBL:X72441; NID:g441350; PIDN:CAA51109.1; PID:CAAA51109.1

C;Superfamily: immunoglobulin V region; immunoglobulin homology

C;Keywords: heterotetramer; immunoglobulin

F;32-106/Domain: immunoglobulin homology <IMM>

Query Match 86.8%; Score 486; DB 2; Length 123;
Best Local Similarity 88.8%; Pred. No. 1.2e-33;
Matches 95; Conservative

Mismatches 8; Indels 0; Gaps 0;

Cy 1 DIQMTQSPSSLASVSGDRVTITCRASKTISKYLAWYQQKPKAPKLLIYGSTLTQSGLGPS 60
:-:|||||:
Db 17 DIQMTQSPSSLASVSGDRVTITCRASGISNYLNWYQQKPKAPKLLIYAASLTQSGLGPS 76
:-:|||||:
Qy 61 RPSGSGSGDTFTLTISLQPEDPATYYCQHNEYPPLTFGGGTKEIKR 107
|||||||:-:|||||:
Db 77 RPSGSGSGDTFTLTISLQPEDPATYYCQHNEYPPLTFGGGTKEIKR 123
|||||||:-:|||||:

RESULT 9

S40352

Ig kappa chain V-J-C region - human

C;Species: Homo sapiens (man)

C;Date: 19-May-1994 #sequence_revision 26-May-1995 #text_change 21-Jan-2000

C;Accession: S40352

R;Klein, R.; Jaenichen, R.; Zachau, H.G.

Eur. J. Immunol. 23, 3248-3271, 1993

A>Title: Expressed human immunoglobulin chi genes and their hypermutation.

A;Reference number: S40312; MUID:94080891; PMID:8258341

A;Accession: S40352

A;Status: preliminary; translation not shown

A:Molecule type: mRNA

A;Residues: 1-131 <KLE>

A;Cross-references: UNIPARC:UPI0000116166; EMBL:X72462; NID:g441392; PIDN:CAA51130.1; PID:CAAA51130.1

C;Superfamily: immunoglobulin V region; immunoglobulin homology

C; Keywords: heterotetramer; immunoglobulin
F; 36-110/Domain: immunoglobulin homology <IMM>

Query Match 86.8%; Score 486; DB 2; Length 131;
Best Local Similarity 87.0%; Pred. No. 1.3e-33;
Matches 94; Conservative 6; Mismatches 8; Indels 0; Gaps 0;

Qy 1 DIQWTQSPSSLSASVGRVITTCRASKTISKYLAWYQOKPGKAPKLLIYSGSTLQSGVPS 60
Db 21 DIQWTQSPSSLSASVGRVITTCRASKTISKYLAWYQOKPGKAPKLLIYSGSTLQSGVPS 80
Qy 61 RFGSGSGTDFTLTISSLOPEDFATYYCQOHNEVPLTFGQGTKEIKR 108
Db 81 RFGSGSGTDFSLTISSLOPEDVATYYCQKNSVPTTFGQGTKEIKR 128

RESULT 10
S40336
Ig kappa chain V-J region - human
C; Species: Homo sapiens (man)
C; Date: 19-May-1994 #sequence_revision 26-May-1995 #text_change 21-Jan-2000
C; Accession: S40336
R; Klein, R.; Jaenichen, R.; Zachau, H.G.
Eur. J. Immunol. 23, 3248-3271, 1993
A; Title: Expressed human immunoglobulin chi genes and their hypermutation.
A; Reference number: S40312; MUID: 94080891; PMID: 8258341
A; Accession: S40336
A; Status: preliminary; translation not shown
A; Molecule type: mRNA
A; Residues: 1-124 <KLE>
C; Cross-references: UNIPARC:UPI0000116156; EMBL:X72446; NID:G441360; PIDN:CAA51114.1; PII
A; Superfamily: immunoglobulin V region; immunoglobulin homology
C; Keywords: heterotetramer; immunoglobulin
F; 31-105/Domain: immunoglobulin homology <IMM>

Query Match 86.5%; Score 484.5; DB 2; Length 124;
Best Local Similarity 88.1%; Pred. No. 1.6e-33;
Matches 96; Conservative 5; Mismatches 7; Indels 1; Gaps 1;

Qy 1 DIQWTQSPSSLSASVGRVITTCRASKTISKYLAWYQOKPGKAPKLLIYSGSTLQSGVPS 60
Db 16 DIQWTQSPSSLSASVGRVITTCRASKTISKYLAWYQOKPGKAPKLLIYSGSTLQSGVPS 75
Qy 61 RFGSGSGTDFTLTISSLOPEDFATYYCQOHNEY-PLTFGQGTKEIKR 108
Db 76 RFGSGSGTDFSLTISSLOPEDFATYYCQQLNTYPPWTFGQGTKEIKR 124

RESULT 11
S36264
Ig lambda chain V region (clone alpha-CEA4-8A) - human (fragment)
C; Species: Homo sapiens (man)
C; Date: 03-Feb-1994 #sequence_revision 03-Feb-1994 #text_change 21-Jan-2000
C; Accession: S36264
R; Griffiths, A.D.; Malmqvist, M.; Marks, J.D.; Bye, J.M.; Embleton, M.J.; McCafferty, J.;
EMBO J. 12, 725-734, 1993
A; Title: Human anti-self antibodies with high specificity from phage display libraries.
A; Reference number: S36256; MUID: 93178448; PMID: 7679990
A; Accession: S36264
A; Status: preliminary; nucleic acid sequence not shown
A; Molecule type: mRNA
A; Residues: 1-107 <GRI>
C; Cross-references: UNIPARC:UPI0000118DF4; EMBL:Z18845; NID:G33426; PIDN:CAA79297.1; PID:
A; Superfamily: immunoglobulin V region; immunoglobulin homology
C; Keywords: heterotetramer; immunoglobulin
F; 16-90/Domain: immunoglobulin homology <IMM>

Query Match 86.2%; Score 483; DB 2; Length 107;
Best Local Similarity 86.0%; Pred. No. 1.9e-33;
Matches 92; Conservative 9; Mismatches 6; Indels 0; Gaps 0;

Qy 1 DIQWTQSPSSLSASVGRVITTCRASKTISKYLAWYQOKPGKAPKLLIYSGSTLQSGVPS 60
Db 16 DIQWTQSPSSLSASVGRVITTCRASKTISKYLAWYQOKPGKAPKLLIYSGSTLQSGVPS 80
Qy 61 RFGSGSGTDFTLTISSLOPEDFATYYCQOHNEY-PLTFGQGTKEIKR 108
Db 76 RFGSGSGTDFSLTISSLOPEDFATYYCQQLNTYPPWTFGQGTKEIKR 124

C; Keywords: heterotetramer; immunoglobulin
F; 36-110/Domain: immunoglobulin homology <IMM>

Query Match 86.8%; Score 486; DB 2; Length 131;
Best Local Similarity 87.0%; Pred. No. 1.3e-33;
Matches 94; Conservative 6; Mismatches 8; Indels 0; Gaps 0;

Qy 1 DIQWTQSPSSLSASVGRVITTCRASKTISKYLAWYQOKPGKAPKLLIYSGSTLQSGVPS 60
Db 21 DIQWTQSPSSLSASVGRVITTCRASKTISKYLAWYQOKPGKAPKLLIYSGSTLQSGVPS 80
Qy 61 RFGSGSGTDFTLTISSLQPEDPATYTCQOHNEVPLTFGQGTKEIKR 108
Db 81 RFGSGSGTDFSLTISSLQPEDVATYCCQKNSVPTTFGQGTKEIKR 128

RESULT 10
S40336
Ig kappa chain V-J region - human
C; Species: Homo sapiens (man)
C; Date: 19-May-1994 #sequence_revision 26-May-1995 #text_change 21-Jan-2000
C; Accession: S40336
R; Klein, R.; Jaenichen, R.; Zachau, H.G.
Eur. J. Immunol. 23, 3248-3271, 1993
A; Title: Expressed human immunoglobulin chi genes and their hypermutation.
A; Reference number: S40312; MUID: 94080891; PMID: 8258341
A; Accession: S40336
A; Status: preliminary; translation not shown
A; Molecule type: mRNA
A; Residues: 1-124 <KLE>
C; Cross-references: UNIPARC:UPI0000116156; EMBL:X72446; NID:G441360; PIDN:CAA51114.1; PII
A; Superfamily: immunoglobulin V region; immunoglobulin homology
C; Keywords: heterotetramer; immunoglobulin
F; 31-105/Domain: immunoglobulin homology <IMM>

Query Match 86.5%; Score 484.5; DB 2; Length 124;
Best Local Similarity 88.1%; Pred. No. 1.6e-33;
Matches 96; Conservative 5; Mismatches 7; Indels 1; Gaps 1;

Qy 1 DIQWTQSPSSLSASVGRVITTCRASKTISKYLAWYQOKPGKAPKLLIYSGSTLQSGVPS 60
Db 16 DIQWTQSPSSLSASVGRVITTCRASKTISKYLAWYQOKPGKAPKLLIYSGSTLQSGVPS 75
Qy 61 RFGSGSGTDFTLTISSLQPEDPATYTCQOHNEY-PLTFGQGTKEIKR 108
Db 76 RFGSGSGTDFSLTISSLQPEDPATYTCQQLNTYPPWTFGQGTKEIKR 124

RESULT 11
S36264
Ig lambda chain V region (clone alpha-CEA4-8A) - human (fragment)
C; Species: Homo sapiens (man)
C; Date: 03-Feb-1994 #sequence_revision 03-Feb-1994 #text_change 21-Jan-2000
C; Accession: S36264
R; Griffiths, A.D.; Malmqvist, M.; Marks, J.D.; Bye, J.M.; Embleton, M.J.; McCafferty, J.;
EMBO J. 12, 725-734, 1993
A; Title: Human anti-self antibodies with high specificity from phage display libraries.
A; Reference number: S36256; MUID: 93178448; PMID: 7679990
A; Accession: S36264
A; Status: preliminary; nucleic acid sequence not shown
A; Molecule type: mRNA
A; Residues: 1-107 <GRI>
C; Cross-references: UNIPARC:UPI0000118DF4; EMBL:Z18845; NID:G33426; PIDN:CAA79297.1; PID:
A; Superfamily: immunoglobulin V region; immunoglobulin homology
C; Keywords: heterotetramer; immunoglobulin
F; 16-90/Domain: immunoglobulin homology <IMM>

Query Match 86.2%; Score 483; DB 2; Length 107;
Best Local Similarity 86.0%; Pred. No. 1.9e-33;
Matches 92; Conservative 9; Mismatches 6; Indels 0; Gaps 0;

Qy 1 DIQWTQSPSSLSASVGRVITTCRASKTISKYLAWYQOKPGKAPKLLIYSGSTLQSGVPS 60
Db 16 DIQWTQSPSSLSASVGRVITTCRASKTISKYLAWYQOKPGKAPKLLIYSGSTLQSGVPS 80
Qy 61 RFGSGSGTDFTLTISSLQPEDPATYTCQOHNEY-PLTFGQGTKEIKR 108
Db 76 RFGSGSGTDFSLTISSLQPEDPATYTCQQLNTYPPWTFGQGTKEIKR 124

Db 1 EIVLTQSPSSLSASVGRVITTCRASQSISSYLWYQOKPGKAPKLLIYAASSLSQSGVPS 60
Qy 61 RFGSGSGTDFTLTISSLSQPEDFATYYCQOHNEYPFLTFGGQTKVEIK 107
Db 61 RFGSGSGTDFTLTISSLSQPEDFATYYCQOHNEYPFLTFGGQTKVDIK 107
RESULT 12
S40334
Ig kappa chain - human
C;Species: Homo sapiens (man)
C;Date: 06-Mar-1994 #sequence_revision 26-May-1995 #text_change 21-Jan-2000
C;Accession: S40334
R;Klein, R.; Jaenichen, R.; Zachau, H.G.
Eur. J. Immunol. 23, 3248-3271, 1993
A;Title: Expressed human immunoglobulin chi genes and their hypermutation.
A;Reference number: S40312; MUID:94080891; PMID:8258341
A;Accession: S40334
A;Status: preliminary; translation not shown
A;Molecule type: mRNA
A;Residues: 1-132 <KLE>
A;Cross-references: UNIPARC:UPI0000176CA9; EMBL:X72444
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: heterotetramer; immunoglobulin
F;37-111/Domain: immunoglobulin homology <IMM>
Query Match 86.2%; Score 483; DB 2; Length 132;
Best Local Similarity 85.2%; Pred. No. 2.3e-33;
Matches 92; Conservative 7; Mismatches 9; Indels 0; Gaps 0;
Qy 1 DIQWTSQPSLSASVGRVITTCRASKTISKYLAWYQOKPGKAPKLLIYSGSTLSQSGVPS 60
Db 22 DIQLTQSPFLSASIGRVTITCRASQSGINSYLAWYQOKPGKAPKLLIYVASTLSQSGVPS 81
Qy 61 RFGSGSGTDFTLTISSLSQPEDFATYYCQOHNEYPFLTFGGQTKVEIKR 108
Db 82 RFGSGSGTDFTLTISSLSQPEDFATYYCQOHNEYPFLTFGGQTKVEIRR 129
RESULT 13
K1HUBN
Ig kappa chain V-I region (Ban) - human
C;Species: Homo sapiens (man)
C;Date: 17-Mar-1987 #sequence_revision 17-Mar-1987 #text_change 09-Jul-2004
C;Accession: A01878
R;Dwulet, F.E.; O'Connor, T.P.; Benson, M.D.
Mol. Immunol. 23, 73-78, 1986
A;Title: Polymorphism in a kappa I primary (AL) amyloid protein (BAN).
A;Reference number: A01878; MUID:86174817; PMID:3083240
A;Accession: A01878
A;Molecule type: protein
A;Residues: 1-108 <DWU>
A;Cross-references: UNIPROT:P04430; UNIPARC:UPI0000012E150
C;Genetics:
A;Gene: GDB:IGKV1
A;Cross-references: GDB:I36264
A;Map position: 2p12-2p12
C;Complex: An immunoglobulin heterotetramer subunit consists of two identical light (kap
hain disulfide bonds. In some cases, such as IgA and IgM, the subunits associate into la
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: amyloid; heterotetramer; immunoglobulin
F;1-23/Region: framework 1
F;16-90/Domain: immunoglobulin homology <IMM>
F;24-34/Region: complementarity-determining 1
F;33-49/Region: framework 2
F;50-56/Region: complementarity-determining 2
F;57-88/Region: framework 3
F;89-97/Region: complementarity-determining 3
F;98-107/Region: framework 4
F;23-88/Disulfide bonds: #status predicted
Query Match 85.9%; Score 481; DB 1; Length 108;
Best Local Similarity 83.3%; Pred. No. 2.8e-33;

Matches 90; Conservative 9; Mismatches 9; Indels 0; Gaps 0;
Qy 1 DIQWTSQPSLSASVGRVITTCRASKTISKYLAWYQOKPGKAPKLLIYSGSTLSQSGVPS 60
Db 1 DIQLTQSPSSLSASVGRVITTCRASQSVYVAVFQOKPGKAPKSLIYDASTLSQSGVPS 60
Qy 61 RFGSGSGTDFTLTISSLSQPEDFATYYCQOHNEYPFLTFGGQTKVEIKR 108
Db 61 NFGSGSGTDFTLTISSLSQPEDFATYYCQOHNEYPFLTFGGQTKVQIKR 108
RESULT 14
S46372
IG light chain variable region (VJ) - human
C;Species: Homo sapiens (man)
C;Date: 07-May-1995 #sequence_revision 21-Jul-1995 #text_change 21-Jan-2000
C;Accession: S46372
R;Bansimon, C.; Chastagner, P.; Zouali, M.
EMBO J. 13, 2951-2962, 1994
A;Title: Human lupus anti-DNA autoantibodies undergo essentially primary V(chi) gene rear
A;Reference number: S46369; MUID:94313975; PMID:8039491
A;Accession: S46372
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-128 <BEN>
A;Cross-references: UNIPARC:UPI0000176CA4; EMBL:Z27173
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: immunoglobulin
F;36-110/Domain: immunoglobulin homology <IMM>
Query Match 85.5%; Score 479; DB 2; Length 128;
Best Local Similarity 86.9%; Pred. No. 4.8e-33;
Matches 93; Conservative 5; Mismatches 9; Indels 0; Gaps 0;
Qy 2 IQWTSQPSLSASVGRVITTCRASKTISKYLAWYQOKPGKAPKLLIYSGSTLSQSGVPSR 61
Db 22 IRITQSPSSLSASVGRVITTCRASQGISSYLAWYQOKPGKAPKLLIYAASTLSQSGVPSR 81
Qy 62 FSGSGSGTDFTLTISSLSQPEDFATYYCQOHNEYPFLTFGGQTKVEIKR 108
Db 82 FSGSGSGTDFTLTISSLSQPEDFATYYCQOHNEYPFLTFGGQTKVEIKR 128
RESULT 15
I69017
anti-HIV1 envelope protein gp120 V3 loop monoclonal antibody L chain V region - human (fi
C;Species: Homo sapiens (man)
C;Date: 29-May-1998 #sequence_revision 29-May-1998 #text_change 21-Jan-2000
C;Accession: I69017
R;Chin, L.T.; Duenas, M.; Levi, M.; Hinkula, J.; Wahren, B.; Borrebaeck, C.A.
Immunol. Lett. 44, 25-30, 1995
A;Title: Molecular characterization of a human anti-HIV 1 monoclonal antibody revealed a
A;Reference number: I54563; MUID:95237884; PMID:7721339
A;Accession: I69017
A;Status: preliminary; translated from GB/EMBL/DBDJB
A;Molecule type: mRNA
A;Residues: 1-107 <RES>
A;Cross-references: UNIPARC:UPI0000113F9C; GB:S77140; NID:g913352; PIDN:AAB34102.1; PID:g
C;Genetics:
A;Gene: Ig Vkappa
C;Superfamily: immunoglobulin V region; immunoglobulin homology
F;16-90/Domain: immunoglobulin homology <IMM>
Query Match 85.4%; Score 478; DB 2; Length 107;
Best Local Similarity 86.0%; Pred. No. 4.9e-33;
Matches 92; Conservative 6; Mismatches 9; Indels 0; Gaps 0;
Qy 1 DIQWTSQPSLSASVGRVITTCRASKTISKYLAWYQOKPGKAPKLLIYSGSTLSQSGVPS 60
Db 1 DIQWTSQPSLSASVGRVITTCRASHDIGSYLAWYQOKPGKAPKSLIYAASSLSQSGVPS 60
Qy 61 RFGSGSGTDFTLTISSLSQPEDFATYYCQOHNEYPFLTFGGQTKVEIK 107

DE 61 RPSGSGTDETLTISSLOPEDEATYYCQYNSYPITFGQGTKVLK 107

Search completed: April 13, 2006, 17:19:34
Job time : 23.1092 secs

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GenCore version 5.1.7
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OM protein - protein search, using sw model
Run on: April 13, 2006, 17:05:24 ; Search time 219.773 Seconds
(without alignments)
215.918 Million cell updates/sec

Title: US-10-727-737-2
Perfect score: 560
Sequence: 1 DIQQTSPSLASVSGDRVT.....QOHNEVPLTFGQTKVEIKR 108

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2443163 seqs, 439378781 residues

Total number of hits satisfying chosen parameters: 2443163

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A Geneseq 21:*
1: Geneseqp1980s:*
2: Geneseqp1980s:*
3: Geneseqp2000s:*
4: Geneseqp2001s:*
5: Geneseqp2002s:*
6: Geneseqp2003as:*
7: Geneseqp2003bs:*
8: Geneseqp2004s:*
9: Geneseqp2005s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Match	Query Length	DB ID	Description
1	560	100.0	108	2 AAW62017	Aaw62017 Light cha
2	560	100.0	108	2 AAW63529	Aaw63529 Humanised
3	560	100.0	108	3 AAY82343	Aay82343 Humanised
4	560	100.0	108	8 ADG38990	Adg38990 Humanised
5	560	100.0	108	8 ADP03365	Adp03365 Humanised
6	560	100.0	108	8 ADW38457	Adw38457 CD11a lig
7	560	100.0	108	9 ADX80645	Adx80645 Humanized
8	560	100.0	214	8 ADF11669	Adf11669 anti-CD11
9	546.5	97.6	109	2 AAY29449	Aay29449 Human lig
10	546.5	97.6	109	3 AAY77752	Aay77752 Human lig
11	546.5	97.6	109	3 AAB30309	Aab30309 Human lig
12	546.5	97.6	109	6 ABU13786	Abu13786 Human lig
13	546.5	97.6	109	6 ABU59499	Abu59499 Human lig
14	546.5	97.6	109	7 AAE33082	Aae33082 Human lig
15	512	91.4	240	4 AAB46020	Aab46020 Human MUC
16	506	90.4	108	2 AAW70622	Aaw70622 Human con
17	506	90.4	108	3 AAY82345	Aay82345 Human con
18	506	90.4	108	5 ABP61191	Abp61191 Human ant
19	506	90.4	108	8 ADG38991	Adg38991 Human con
20	506	90.4	108	8 ADP03366	Adp03366 Human sub
21	506	90.4	108	8 ADP79572	Adp79572 Human kap
22	506	90.4	109	5 AAU74544	Aau74544 Human sub
23	506	90.4	109	5 AEA38745	Aea38745 Human VL
24	506	90.4	110	5 AAE28149	Aae28149 Human con

25	505	90.2	127	4 AAU09917	Aau09917 Light cha
26	505	90.2	127	5 ABG75526	Abg75526 Humanised
27	505	90.2	233	7 ADL23195	Adl23195 Human ant
28	504	90.0	109	2 AAR40956	Aar40956 Human ger
29	503	89.8	240	4 AAB45991	Aab45991 Human MUC
30	502	89.6	108	9 ADW04801	Adw04801 PAPP-A im
31	501	89.5	107	4 AAB62087	Aab62087 Human VL
32	501	89.5	107	4 AAB60400	Aab60400 Consensus
33	501	89.5	107	4 AAB61585	Aab61585 Human var
34	501	89.5	107	8 ADE71454	Ade71454 Human ant
35	501	89.5	107	8 ADJ88008	Adj88008 Human var
36	501	89.5	107	8 ADN12054	Adn12054 Variable
37	501	89.5	107	8 ADP43328	Adp43328 Human mon
38	501	89.5	108	6 ABJ18679	Abj18679 Antibody
39	501	89.5	109	2 AAW27543	Aaw27543 Human Ab
40	501	89.5	240	4 AAB46004	Aab46004 Human MUC
41	499	89.1	130	3 AAY56737	Aay56737 Amino aci
42	499	89.1	234	7 ADM47073	Adm47073 Mouse ant
43	499	89.1	240	4 AAB45993	Aab45993 Human MUC
44	497	88.8	108	8 ADO36411	Ado36411 Intracell
45	497	88.8	108	9 AEA41087	Aea41087 Germline

ALIGNMENTS

RESULT 1
AAW62017
ID AAW62017 standard; peptide; 108 AA.
XX
XX AAW62017;
AC
DT 01-OCT-1998 (first entry)
XX
DE Light chain variable region of humanised anti-CD11a antibody.
XX
KW Complementarity determining region; light chain variable region;
KW humanised antibody; MHM24F(ab)-8; anti-CD11a antibody;
KW human CD11a I domain; MHM24 epitope; alpha subunit;
KW lymphocyte function-associated antigen 1; LFA-1; immunoassay;
KW in vivo imaging; diagnosis; CD11a-associated disease.
XX
XX Mus sp.
OS Homo sapiens.
XX
XX WO9823761-A1.
XX
XX 04-JUN-1998.
XX
XX 20-OCT-1997; 97WO-US019041.
XX
XX 27-NOV-1996; 96US-00757205.
XX
XX (GETH) GENENTECH INC.
XX
XX Jardieu PM, Presta LG;
PI WPI; 1998-322737/28.
XX
XX New humanised anti-CD11a antibody - used in immunoassays for CD11a, and
XX also to treat conditions such as immunological or inflammatory disease.
XX
XX Claim 9; Page 48; 66pp; English.

The present sequence represents the light chain variable region of a humanised anti-CD11a antibody that binds specifically to the human CD11a I domain (MHM24 epitope). CD11a refers to the alpha subunit of lymphocyte function-associated antigen 1 (LFA-1) from any mammal. The humanised anti-CD11a antibodies are used to determine presence of CD11a in usual immunoassays or by in vivo imaging, particularly for diagnosis of CD11a-associated diseases (typically immune responses and inflammation such as psoriasis, Crohn's disease, rheumatoid arthritis, transplant rejection, leukaemia, etc

XX SQ Sequence 108 AA;

Query Match 100.0%; Score 560; DB 2; Length 108;
 Best Local Similarity 100.0%; Pred. No. 4.9e-33;
 Matches 108; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DIQMTQSPSSLSASVGRVITTCRASTISKYLAWYQKPKAPKLLIYSGSTLQSGVPS 60
 |||||
 Db 1 DIQMTQSPSSLSASVGRVITTCRASTISKYLAWYQKPKAPKLLIYSGSTLQSGVPS 60
 |||||

Qy 61 RFGSGSGTDTLTITISLQPEDFATYYCQHNVEPLTFGQGTKEIKR 108
 |||||
 Db 61 RFGSGSGTDTLTITISLQPEDFATYYCQHNVEPLTFGQGTKEIKR 108
 |||||

RESULT 2
 AAW63529
 ID AAW63529 standard; protein; 108 AA.
 XX
 AC AAW63529;
 XX
 DT 06-OCT-1998 (first entry)
 XX
 DE Humanised MHM24 light chain.
 XX
 KW Antibody mutant production; species-dependent antibody; malignancy;
 KW infection; haematopoiesis; lymphocyte function-associated antigen-1;
 KW intercellular adhesion molecule-1; inflammatory disease; CD11a; therapy;
 KW autoimmune disease; transplant rejection; tumour cell invasion;
 KW human immune deficiency virus infection; light chain.
 XX
 OS Synthetic.
 XX
 PN W09823746-A1.
 XX
 PD 04-JUN-1998.
 XX
 PF 29-OCT-1997; 97MO-US020169.
 XX
 PR 27-NOV-1996; 96US-00756150.
 XX
 PA (GETH) GENENTECH INC.
 XX
 PI Jardieu PM, Presta LG;
 XX
 DR WPI; 1998-322726/28.
 XX
 PT Mutants of species-dependent antibodies with affinity for non-human
 PT mammalian antigen - greater than for parent antibody, particularly used
 PT for pre-clinical trial(s) in rhesus monkey(s) of therapeutic antibodies
 PT directed against CD11a.
 XX
 PS Disclosure; Page 53; 71pp; English.
 XX
 CC This sequence represents the light chain of the humanised antibody MHM24,
 CC and was used to produce a mutant of the invention. The mutants are of a
 CC species-dependent antibody (Ab), and have an amino acid substitution in a
 CC variable region of the Ab, and binding affinity for an antigen (Ag) from
 CC a non-human mammal at least 10 times stronger than for the wild type Ab
 CC against the Ag. The mutant antibodies are particularly intended for
 CC administration to a non-human mammal in preclinical studies (e.g. of
 CC infection, immunity, haematopoiesis or transplantation). They can also be
 CC used diagnostically (to identify specific proteins) or therapeutically,
 CC e.g. where directed against CD11a (lymphocyte function-associated antigen
 CC -1) or intercellular adhesion molecule-1 against a wide variety of
 CC inflammatory or autoimmune diseases, malignancies, transplant rejection,
 CC human immune deficiency virus infection and tumour cell invasion.
 CC Conversion to the mutant form allows useful antibodies to be produced
 CC from antibodies which normally have affinity for non-human analogues of
 CC the Ag too low to be of any use
 XX
 SQ Sequence 108 AA;

Query Match 100.0%; Score 560; DB 2; Length 108;
 Best Local Similarity 100.0%; Pred. No. 4.9e-33;
 Matches 108; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DIQMTQSPSSLSASVGRVITTCRASTISKYLAWYQKPKAPKLLIYSGSTLQSGVPS 60
 |||||
 Db 1 DIQMTQSPSSLSASVGRVITTCRASTISKYLAWYQKPKAPKLLIYSGSTLQSGVPS 60
 |||||

Qy 61 RFGSGSGTDTLTITISLQPEDFATYYCQHNVEPLTFGQGTKEIKR 108
 |||||
 Db 61 RFGSGSGTDTLTITISLQPEDFATYYCQHNVEPLTFGQGTKEIKR 108
 |||||

RESULT 3
 AAY82343
 ID AAY82343 standard; protein; 108 AA.
 XX
 AC AAY82343;
 XX
 DT 22-JUN-2000 (first entry)
 XX
 DE Humanised anti-CD11a antibody light chain variable region SEQ ID NO:2.
 XX
 KW Humanised; anti-CD11a; antibody; anti-inflammatory; immunosuppressant;
 KW antitumour; antiviral; inflammation; immunological response; LFA-1;
 KW lymphocyte function-associated antigen-1; psoriasis; rhinitis; eczema;
 KW inflammatory bowel disease; systemic lupus erythematosus; leukaemia;
 KW viral infection; transplant rejection; graft rejection.
 XX
 OS Homo sapiens.
 OS Mus sp.
 XX
 PN US6037454-A.
 XX
 PD 14-MAR-2000.
 XX
 PF 20-NOV-1997; 97US-00974899.
 XX
 PR 27-NOV-1996; 96US-0031971P.
 XX
 PA (GETH) GENENTECH INC.
 XX
 PI Jardieu PM, Presta LG;
 XX
 DR WPI; 2000-282241/24.
 XX
 PT New humanized anti-CD11a antibody, useful for treating or preventing e.g.
 PT inflammation and transplant rejection, contains human heavy variable
 PT region complementarity determining regions.
 XX
 PS Claim 5; Fig 1; 38pp; English.
 XX
 CC The present invention describes a humanised anti-CD11a antibody (Ab) that
 CC binds specifically to the human CD11a I-domain. The Ab has anti-
 CC inflammatory, immunosuppressant, antitumour and antiviral activities. The
 CC Ab blocks lymphocyte function-associated antigen (LFA-1) which is
 CC involved in leucocyte adhesion associated with inflammatory and
 CC immunological responses. The Ab are used: (i) optionally when coupled to
 CC a cytotoxin, to treat or prevent disorders mediated by lymphocyte
 CC function-associated antigen-1 (LFA-1; CD11a/CD18), e.g. psoriasis,
 CC inflammatory bowel disease, eczema, systemic lupus erythematosus,
 CC rhinitis, leukaemia, viral infections and many others, also for
 CC inhibiting graft rejection; (ii) when labeled, to detect CD11a; (iii) for
 CC tumour pretreatment; (iv) for delivery of enzymes that convert prodrugs
 CC to active anticancer agent; and (v) for affinity chromatography. The Ab
 CC retain about the same activity in adhesion and mixed lymphocyte response
 CC assays as the murine antibodies from which they are derived. The murine
 CC anti-CD11a antibody MHM24 has IC50 0.09 nM for preventing adhesion
 CC between Jurkat cells (expressing LFA-1) and normal epidermal
 CC keratinocytes that express ICAM-1 (intracellular adhesion molecule-1).
 CC The fully humanized version of MHM24 had IC50 0.13 nM. The present
 CC sequence represents the light chain variable region of the humanised anti

CC -CD11a Ab
 XX Sequence 108 AA;
 SQ

Query Match 100.0%; Score 560; DB 3; Length 108;
 Best Local Similarity 100.0%; Pred. No. 4.9e-33;
 Matches 108; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DIQWTQSPSSLSASVGRVTITCRASKTISKYLAWYQOKPGKAPKLLIYSGSTLQSGVPS 60
 DB 1 DIQWTQSPSSLSASVGRVTITCRASKTISKYLAWYQOKPGKAPKLLIYSGSTLQSGVPS 60

QY 61 RFGSGSGTDFLTITSSLOPEDFATYYCOQHNEVPLTFGQGTKEIKR 108
 DB 61 RFGSGSGTDFLTITSSLOPEDFATYYCOQHNEVPLTFGQGTKEIKR 108

RESULT 4
 ADG38990
 ID ADG38990 standard; protein; 108 AA.
 XX
 AC ADG38990;
 XX
 DT 26-FEB-2004 (first entry)
 XX
 DE Humanised Mouse anti-CD11a antibody light chain variable region.
 XX
 KW Mouse; CD11a; I-domain; monoclonal antibody; light chain variable region;
 KW VL; cluster of differentiation 11a; mixed lymphocyte response assay;
 KW Jurkat cell; epidermal keratinocyte; intercellular adhesion molecule;
 KW ICAM-1; lymphocyte function-associated antigen 1 mediated disorder;
 KW psoriasis; Crohn's disease; ulcerative colitis; dermatitis; asthma;
 KW rheumatoid arthritis; systemic lupus erythematosus; multiple sclerosis;
 KW diabetes mellitus; prodrug activating enzyme; humanised.
 XX
 OS Synthetic.
 OS Mus sp.
 XX
 PN US2003207336-A1.
 XX
 PD 06-NOV-2003.
 XX
 PF 28-FEB-2001; 2001US-00795798.
 XX
 PR 27-NOV-1996; 96US-0031971P.
 PR 20-NOV-1997; 97US-00974899.
 PR 20-OCT-1999; 99US-00420745.
 XX
 PA (GETH) GENENTECH INC.
 XX
 PI Jardieu PM, Presta LG;
 XX
 DR WPI; 2004-051511/05.
 XX
 PF Humanized anti-CD11a antibody useful for treating lymphocyte function-
 PT associated antigen mediated disorder e.g. psoriasis, Crohn's disease,
 PT ulcerative colitis, dermatitis, asthma, rheumatoid arthritis.
 XX
 PS Claim 9; SEQ ID NO 2; 43pp; English.
 XX
 CC The invention relates to a Humanised anti-cluster of differentiation
 CC (CD)11a antibody having specificity to human CD11a I-domain or CD11a with
 CC a kd value of not more than 1x10⁻⁸ M, or concentration for 50 %
 CC inhibition (IC50) (nM) value of not more than 1 nM in mixed lymphocyte
 CC response assay or for preventing adhesion of Jurkat cells to normal human
 CC epidermal keratinocytes expressing intercellular adhesion molecule (ICAM)
 CC -1. Also included are a kit comprising the antibody and instructions for
 CC use to detect the CD11a protein, an isolated nucleic acid encoding the
 CC antibody, a vector comprising the nucleic acid, a host cell comprising
 CC the vector and producing the antibody by culturing the cell so that the
 CC antibody is expressed. The antibody binds to epitope MHM24 on CD11a. The
 CC antibody is useful for determining the presence of CD11a protein and for
 CC treating lymphocyte function-associated antigen 1 mediated disorder such

CC as psoriasis, Crohn's disease, ulcerative colitis, dermatitis, asthma,
 CC rheumatoid arthritis, systemic lupus erythematosus, multiple sclerosis
 CC and diabetes mellitus. The antibody is useful when conjugated to a
 CC prodrug activating enzyme, or as an affinity purification agent. The
 CC present sequence is the light chain variable region (VL) of the humanised
 CC mouse anti-CD11a I domain monoclonal antibody MHM24.
 XX
 SQ Sequence 108 AA;
 Query Match 100.0%; Score 560; DB 8; Length 108;
 Best Local Similarity 100.0%; Pred. No. 4.9e-33;
 Matches 108; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DIQWTQSPSSLSASVGRVTITCRASKTISKYLAWYQOKPGKAPKLLIYSGSTLQSGVPS 60
 DB 1 DIQWTQSPSSLSASVGRVTITCRASKTISKYLAWYQOKPGKAPKLLIYSGSTLQSGVPS 60

QY 61 RFGSGSGTDFLTITSSLOPEDFATYYCOQHNEVPLTFGQGTKEIKR 108
 DB 61 RFGSGSGTDFLTITSSLOPEDFATYYCOQHNEVPLTFGQGTKEIKR 108

RESULT 5
 ADR03365
 ID ADR03365 standard; protein; 108 AA.
 XX
 AC ADR03365;
 XX
 DT 21-OCT-2004 (first entry)
 XX
 DE Humanised MHM24 F(ab)-8 antibody variable light chain protein.
 XX
 KW CD11a antibody; human immunodeficiency virus infection; HIV infection;
 KW rhinovirus infection; inflammatory skin disease; psoriasis;
 KW inflammatory bowel disease; Crohn's disease; ulcerative colitis;
 KW adult respiratory distress syndrome; allergic disease; eczema; asthma;
 KW autoimmune disease; rheumatoid arthritis; systemic lupus erythematosus;
 KW SLE; diabetes mellitus; Reynaud's syndrome; immunological disease;
 KW tuberculosis; sarcoidosis; polymyositis;
 KW chronic obstructive pulmonary disease; COPD; CNS inflammatory disorder;
 KW skin hypersensitivity disorder; poison ivy; poison oak;
 KW B-cell malignancy; chronic lymphocytic leukaemia; hairy cell leukaemia;
 KW graft versus host disease; cancer; gene therapy;
 KW murine anti-human CD11a monoclonal antibody; MHM24; variable light chain;
 KW VL; murine; human; fusion protein.
 XX
 OS Mus sp.
 OS Homo sapiens.
 OS Chimeric.
 XX
 PN US2004146507-A1.
 XX
 PD 29-JUL-2004.
 XX
 PF 03-DEC-2003; 2003US-00727737.
 XX
 PR 27-NOV-1996; 96US-0031945P.
 PR 20-NOV-1997; 97US-00975329.
 XX
 PA (GETH) GENENTECH INC.
 XX
 PI Jardieu PM, Presta LG;
 XX
 DR WPI; 2004-552640/53.
 XX
 PT New antibody mutant of a species-dependent antibody, useful for treating
 PT and preventing infectious diseases, psoriasis, inflammatory bowel
 PT disease, allergic conditions, autoimmune diseases, or cancer.
 XX
 PS Example; SEQ ID NO 2; 54pp; English.
 XX
 CC The present invention relates to an antibody mutant of a species-
 CC dependent antibody with beneficial properties. The invention is useful

CC for treating and preventing infectious diseases such as human
 CC immunodeficiency virus (HIV) and rhinovirus infections, inflammatory skin
 CC disease such as psoriasis, inflammatory bowel diseases such as Crohn's
 CC disease and ulcerative colitis, adult respiratory distress syndrome,
 CC allergic diseases such as eczema and asthma, autoimmune diseases such as
 CC rheumatoid arthritis, systemic lupus erythematosus (SLE), diabetes
 CC mellitus, Reynaud's syndrome, immunological diseases such as
 CC disease (COPD), CNS inflammatory disorder, skin hypersensitivity
 CC disorders such as poison ivy and poison oak, B-cell malignancies such as
 CC chronic lymphocytic leukaemia and hairy cell leukaemia, graft versus host
 CC disease and cancer. The invention is also useful in gene therapy. The
 CC present sequence is humanized murine anti-human CD11a monoclonal antibody
 CC (MHM24) F(ab)-8 variable light chain protein. This sequence is used in
 CC the exemplification of the invention.

XX SQ Sequence 108 AA;
 Query Match 100.0%; Score 560; DB 8; Length 108;
 Best Local Similarity 100.0%; Pred. No. 4.9e-33;
 Matches 108; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 DIQWTQSPSSLSASVGRVITTCRASTISKYLAWYQQKPKAPKLLIYSGSTLQSGVPS 60
 DB 1 DIQWTQSPSSLSASVGRVITTCRASTISKYLAWYQQKPKAPKLLIYSGSTLQSGVPS 60
 QY 61 RFGSGSGTDFTLTISLSQPEDFATYYCQQHNEYPPLTFGGQTKVEIKR 108
 DB 61 RFGSGSGTDFTLTISLSQPEDFATYYCQQHNEYPPLTFGGQTKVEIKR 108

RESULT 6
 ADW38457
 ID ADW38457 standard; protein; 108 AA.
 XX
 AC ADW38457;
 XX
 DT 24-MAR-2005 (first entry)
 XX
 DE CD11a light chain variable region #2.
 XX
 KW monoclonal antibody; CD11a; light-chain variable region;
 KW heavy-chain variable region.
 XX Homo sapiens.
 XX CNL439651-A.
 XX 03-SEP-2003.
 XX 20-FEB-2002; 2002CN-00110866.
 XX 20-FEB-2002; 2002CN-00110866.
 XX (ZHON-) ZHONGXIN GUOJIAN PHARM CO LTD SHANGHAI.
 XX Wang H, Wang J;
 XX WPI; 2004-169719/17.
 XX Recombinant human CD11a monoclonal antibody and its preparation and
 PT medicinal composition.

PS Claim 1; Page 14; 16pp; Chinese.
 XX The present invention relates to a recombinant monoclonal antibody for
 CC human CD11a has the amino acid sequence shown by SEQ ID No.1 or SEQ ID
 CC No.5 in light-chain variable region and the amino acid sequence shown by
 CC SEQ ID No.2 or SEQ ID No.6 in heavy-chain variable region. Its
 CC bioactivity and the expression in host cell are greatly increased. The
 CC DNA molecule for coding the antibody, its preparation process and the
 CC medicinal composition containing it are also disclosed. The present
 CC sequence represents a light chain variable region of human CD11a.

XX SQ Sequence 108 AA;
 Query Match 100.0%; Score 560; DB 8; Length 108;
 Best Local Similarity 100.0%; Pred. No. 4.9e-33;
 Matches 108; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 DIQWTQSPSSLSASVGRVITTCRASTISKYLAWYQQKPKAPKLLIYSGSTLQSGVPS 60
 DB 1 DIQWTQSPSSLSASVGRVITTCRASTISKYLAWYQQKPKAPKLLIYSGSTLQSGVPS 60
 QY 61 RFGSGSGTDFTLTISLSQPEDFATYYCQQHNEYPPLTFGGQTKVEIKR 108
 DB 61 RFGSGSGTDFTLTISLSQPEDFATYYCQQHNEYPPLTFGGQTKVEIKR 108

RESULT 7
 ADX80645
 ID ADX80645 standard; protein; 108 AA.
 XX
 AC ADX80645;
 XX
 DT 05-MAY-2005 (first entry)
 XX
 DE Humanized CD11a variable light chain amino acid sequence, seq id 5.
 XX
 KW Protein purification; leaching; protein A affinity chromatography; CD11a;
 KW antibody.
 XX Synthetic.
 XX US2005038231-A1.
 XX 17-FEB-2005.
 XX 24-JUN-2004; 2004US-00877532.
 XX 28-JUL-2003; 2003US-0490500P.
 XX (GETH) GENENTECH INC.
 XX Fahrner RL, Laverdiere A, McDonald PU, O'leary RM;
 XX WPI; 2005-172327/18.
 XX Purifying a protein, e.g. antibody or immunoadhesin, comprises reducing
 PT the temperature of a composition subjected to protein A affinity
 PT chromatography to 3-20 degrees C, where protein A leaching is reduced.
 XX Disclosure; SEQ ID NO 5; 27pp; English.

CC The invention relates to a method of purifying a protein which comprises
 CC a CH2/CH3 region by protein A affinity chromatography. The method
 CC involves reducing the temperature of a composition comprising the protein
 CC and one or more impurities subjected to protein A affinity chromatography
 CC to 3-20 degrees Celsius, where protein A leaching is reduced. Preferably
 CC the protein is antibody. The antibody is selected from Trastuzumab,
 CC humanized 2C4, humanized CD11a antibody, and humanized VEGF antibody.
 CC Preferably, the antibody binds HER2 antigen, where the antibody is
 CC Trastuzumab or humanized 2C4. The protein is an immunoadhesin,
 CC specifically a TNF receptor immunoadhesin. The methods are useful for
 CC purifying a protein, which comprises a CH2/CH3 region by protein A
 CC affinity chromatography and for reducing leaching of protein A during
 CC protein A affinity chromatography. The current sequence represents the
 CC variable light chain amino acid sequence of CD11a.

XX SQ Sequence 108 AA;
 Query Match 100.0%; Score 560; DB 9; Length 108;
 Best Local Similarity 100.0%; Pred. No. 4.9e-33;
 Matches 108; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 DIQWTQSPSSLSASVGRVITTCRASTISKYLAWYQQKPKAPKLLIYSGSTLQSGVPS 60

Db 1 DIQMTQSPSSLSASVGRVTITCRASKTISKYLAWYQKPGKAPKLLIYSGSTLSQGVPS 60
Cv 61 RFGSGSGTDTFTLTISLQPEDPATYTCQOHNEYPPLTFGQGTKEIKR 108
Lb 61 RFGSGSGTDTFTLTISLQPEDPATYTCQOHNEYPPLTFGQGTKEIKR 108
RESULT 8
ADFL1669
ID ADFL1669 standard; protein; 214 AA.
AC ADFL1669;
XZ 26-FEB-2004 (first entry)
DT anti-CD11a rhuMab light chain amino acid sequence #SEQ ID 3.
DE Purifying; target protein; non-affinity purification;
XW high-performance tangential flow filtration; HPTFF; pharmaceutical;
XW diagnostic; therapeutic; antibody.
XX Synthetic.
OS WO2003102132-A2.
XZ 11-DEC-2003.
XZ 25-APR-2003; 2003WO-US013054.
XZ 26-APR-2002; 2002US-0375953P.
XZ (GETH) GENENTECH INC.
XZ Fahner RL, Follman D, Lebreton B, Van Reis R;
XZ WPI; 2004-043096/04.
DR Purifying target protein from mixture containing host cell protein
PT involves subjecting mixture to non-affinity purification, high-
PT performance tangential flow filtration and isolating purified protein.
XZ Disclosure; SEQ ID NO 3; 77pp; English.
XX The invention relates to a method for purifying a target protein from a
CC mixture containing a host cell protein. This method comprises subjecting
CC the mixture to a non-affinity purification followed by high-performance
CC tangential flow filtration (HPTFF) and isolating the protein in a purity
CC containing less than 100 parts/million (ppm) of the host cell protein,
CC where the method of the invention includes no affinity purification
CC process. The method of the invention is useful for purifying a target
CC protein from a mixture containing a host cell protein, and is useful for
CC incorporating the isolated protein into a pharmaceutical formulation.
CC Proteins purified using the method of the invention are useful in a
CC pharmaceutical respect, and are also useful in various diagnostic and
CC therapeutic purposes. The method of the invention is efficient in
CC purifying a target protein from a mixture containing a host cell protein,
CC and may also be effectively performed at low cost. The current sequence
CC represents the anti-CD11a rhuMab light chain amino acid sequence. This
CC particular protein was used to demonstrate the method of the invention.
XX
SQ Sequence 214 AA;
Query Match 100.0%; Score 560; DB 8; Length 214;
Best Local Similarity 100.0%; Pred. No. 8.9e-33;
Matches 108; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 DIQMTQSPSSLSASVGRVTITCRASKTISKYLAWYQKPGKAPKLLIYSGSTLSQGVPS 60
Db 1 DIQMTQSPSSLSASVGRVTITCRASKTISKYLAWYQKPGKAPKLLIYSGSTLSQGVPS 60
Qy 61 RFGSGSGTDTFTLTISLQPEDPATYTCQOHNEYPPLTFGQGTKEIKR 108

Db 61 RFGSGSGTDTFTLTISLQPEDPATYTCQOHNEYPPLTFGQGTKEIKR 108
RESULT 9
AAY29449
ID AAY29449 standard; protein; 109 AA.
XX AAY29449;
AC AAY29449;
XZ 05-OCT-1999 (first entry)
DT Human light chain kappa-I consensus framework.
DE Antibody; humanised; anti-IL-8 monoclonal antibody; interleukin 8;
XW diagnosis; inflammatory disorder; conjugate; immunoglobulin;
XW fusion protein.
XX Homo sapiens.
OS WO9937779-A1.
XZ 29-JUL-1999.
XZ 19-JAN-1999; 99WO-US001081.
XZ 22-JAN-1998; 98US-00012116.
XZ 20-FEB-1998; 98WO-US003337.
XZ 24-JUL-1998; 98US-00121952.
XZ 24-JUL-1998; 98US-00122513.
XZ (GETH) GENENTECH INC.
XZ Hsei V, Koumenis I, Leong SJ, Presta LG, Shahrokh Z, Zapata GA;
XZ WPI; 1999-469134/39.
DR New conjugates of nonproteinaceous polymers with antibody fragments, used
PT for treating inflammatory disorders.
XZ Disclosure; Fig 29; 360pp; English.
XX The present invention describes a novel conjugate having one or more
CC antibody fragments covalently attached to one or more nonproteinaceous
CC polymer molecules, where the apparent size of the conjugate is at least
CC about 500 kDa. Conjugates of antibody fragments which bind the human
CC interleukin (IL) 8 with a nonproteinaceous polymer can be used for
CC treating inflammatory disorders e.g. acute lung injury, ischaemic
CC reperfusion disorder, and autoimmune diseases. They can also be used for
CC treating e.g. inflammatory skin diseases including psoriasis and atopic
CC dermatitis, systemic scleroderma and sclerosis, and asthmatic diseases.
CC The conjugates can also be used as reagents in an animal model system for
CC in vivo study of the biological functions of the antigen recognised by
CC the conjugate. The present sequence represents the human light chain
CC kappa-I consensus framework from the present invention
XX
SQ Sequence 109 AA;
Query Match 97.6%; Score 546.5; DB 2; Length 109;
Best Local Similarity 98.2%; Pred. No. 4.6e-32;
Matches 107; Conservative 1; Mismatches 0; Indels 1; Gaps 1;
Qy 1 DIQMTQSPSSLSASVGRVTITCRASKTISKYLAWYQKPGKAPKLLI-YSGSTLSQGVPS 59
Db 1 DIQMTQSPSSLSASVGRVTITCRASKTISKYLAWYQKPGKAPKLLIYSGSTLSQGVPS 60
Qy 60 SRFGSGSGTDTFTLTISLQPEDPATYTCQOHNEYPPLTFGQGTKEIKR 108
Db 61 SRFGSGSGTDTFTLTISLQPEDPATYTCQOHNEYPPLTFGQGTKEIKR 109
RESULT 10
AAY77752
ID AAY77752 standard; protein; 109 AA.

XX AC AAY7752;
 XX DT 06-JUN-2000 (first entry)
 XX DE Human light chain k1 consensus framework.
 XX KW Interleukin-8; IL-8; monoclonal antibody; Mab; anti-IL-8; 6G4.2.5V11N35A;
 KW KW inflammatory disorder; adult respiratory distress syndrome; chimeric;
 XX KW affinity purification; 6G4.2.5.
 XX OS Homo sapiens.
 XX PN US6025158-A.
 XX PD 15-FEB-2000.
 XX PF 20-FEB-1998; 98US-00027449.
 XX PR 21-FEB-1997; 97US-0038664P.
 XX PR 22-JAN-1998; 98US-0074330P.
 XX PA (GETH) GENENTECH INC.
 XX PI Presta LG, Leong SR, Gonzalez TN;
 XX DR WPI; 2000-181809/16.
 XX CC New nucleic acid molecule encodes a polypeptide which is an anti-
 PT interleukin-8 monoclonal antibody or antibody fragment useful for the
 PT production of anti-interleukin-8 monoclonal antibodies or fragments.
 XX PS Example; Fig 29; 188pp; English.
 XX CC The invention relates to an anti-interleukin-8 (IL-8) monoclonal antibody
 CC (Mab). The anti-IL-8 Mab comprises a sequence containing the CDRs
 CC (complementarity determining regions) of the humanized anti-IL-8
 CC 6G4.2.5V11N35A light chain; and amino acids 24-253 of the humanized anti-
 CC IL-8 6G4.2.5V11N35A heavy chain. The anti-IL-8 Mab and fragments can be
 CC used in diagnosis, for affinity purification of IL-8 from recombinant
 CC cell culture or natural sources and for the treatment of inflammatory
 CC disorders e.g. adult respiratory distress syndrome. Nucleic acids
 CC encoding the anti-IL-8 Mab can be associated in a vector with another
 CC gene encoding another protein or protein fragment to produce a fusion
 CC protein which can make isolation and/or purification of the protein an
 CC easier process
 XX SQ Sequence 109 AA;
 Query Match 97.6%; Score 546.5; DB 3; Length 109;
 Best Local Similarity 98.2%; Pred. No. 4.6e-32;
 Matches 107; Conservative 1; Mismatches 0; Indels 1; Gaps 1;
 Qy 1 DIQWTSPPSSLSASVGRVITTCRASKTISKYLAWYQKPKAPKLLI-YSGSTLQSGVP 59
 Db 1 DIQWTSPPSSLSASVGRVITTCRASKTISKYLAWYQKPKAPKLLIYSGSTLQSGVP 60
 Qy 60 SRFGSGSGTDFLTITSSLPEDPATYCCQHNEYPLTFGGTKVEIKR 108
 Db 61 SRFGSGSGTDFLTITSSLPEDPATYCCQHNEYPLTFGGTKVEIKR 109
 RESULT 11
 AAB30309
 ID AAB30309 standard; protein; 109 AA.
 XX AC AAB30309;
 XX DT 12-FEB-2001 (first entry)
 XX DE Human light chain kappa1 consensus framework SEQ ID NO: 47.
 XX KW Humanised antibody; anti-IL-8; interleukin-8; inflammation; septic shock;

KW adult respiratory distress syndrome; multiple organ failure;
 KW bacterial pneumonia; inflammatory bowel disease.
 OS Homo sapiens.
 XX US6133426-A.
 XX PD 17-OCT-2000.
 XX PF 20-FEB-1998; 98US-00026985.
 XX PR 21-FEB-1997; 97US-0038664P.
 XX PR 22-JAN-1998; 98US-0074330P.
 XX PA (GETH) GENENTECH INC.
 XX PI Presta LG, Leong SR, Gonzalez TN;
 XX DR WPI; 2000-686027/67.
 XX CC Humanized anti-interleukin 8 monoclonal antibody variant useful for
 PT treating inflammatory disorders, such as adult respiratory distress
 PT syndrome, hypovolemic shock and ulcerative colitis.
 XX PS Disclosure; Col 161-162; 240pp; English.
 XX CC The present invention provides a number of humanised monoclonal anti-IL-8
 CC antibodies which can be used in the diagnosis and treatment of
 CC inflammatory disorders, including adult respiratory distress syndrome,
 CC septic shock, multiple organ failure, bacterial pneumonia and
 CC inflammatory bowel disease. The present sequence comprises one of the
 CC antibodies of the invention
 XX SQ Sequence 109 AA;
 Query Match 97.6%; Score 546.5; DB 3; Length 109;
 Best Local Similarity 98.2%; Pred. No. 4.6e-32;
 Matches 107; Conservative 1; Mismatches 0; Indels 1; Gaps 1;
 Qy 1 DIQWTSPPSSLSASVGRVITTCRASKTISKYLAWYQKPKAPKLLI-YSGSTLQSGVP 59
 Db 1 DIQWTSPPSSLSASVGRVITTCRASKTISKYLAWYQKPKAPKLLIYSGSTLQSGVP 60
 Qy 60 SRFGSGSGTDFLTITSSLPEDPATYCCQHNEYPLTFGGTKVEIKR 108
 Db 61 SRFGSGSGTDFLTITSSLPEDPATYCCQHNEYPLTFGGTKVEIKR 109
 RESULT 12
 ABUL3786
 ID ABUL3786 standard; protein; 109 AA.
 XX AC ABUL3786;
 XX DT 25-FEB-2003 (first entry)
 XX DE Human light chain kappa1 consensus framework sequence.
 XX KW Antibody; monoclonal antibody; 5.12.14; 6G4.2.5; interleukin-8; mAb;
 KW anti-inflammatory; respiratory; acute lung injury; polyethylene glycol;
 KW PSG; lung injury; adult respiratory distress syndrome; ARDS; asthma;
 KW inflammatory disease; inflammatory bowel disease; psoriasis; scleroderma;
 KW ischaemic reperfusion disorder; stroke; multiple sclerosis; meningitis;
 KW osteoarthritis; septic shock; autoimmune disease; rheumatoid arthritis;
 KW alcoholic hepatitis; cystic fibrosis; human.
 XX OS Homo sapiens.
 XX PN US6468532-B1.
 XX PD 22-OCT-2002.
 XX PR 20-JAN-1999; 99US-00234340.

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XX 22-JAN-1998; 98US-0074330P.
PR 20-FEB-1998; 98US-0075467P.
PR 24-JUL-1998; 98US-0094003P.
PR 24-JUL-1998; 98US-0094013P.
PA (GETH ) GENENTECH INC.
XX
XX Hsei V, Koumenis I, Leong S, Presta L, Shahrokh Z, Zapata G;
PI WPI; 2003-138230/13.
DE
XX
XX Treating acute lung injury in mammal by administering to mammal a 500 kD
PT conjugate comprising F(ab') 2 antibody fragment that binds to human
PT interleukin-8, covalently attached to one or two polyethylene glycol
PT molecules.
XX
XX Example G; Fig 29; 259pp; English.
XX
XX The invention relates to treating acute lung injury in a mammal,
XX comprising administering to the mammal an effective amount of a conjugate
XX of a single antibody fragment covalently attached to 1 or 2 polyethylene
XX glycol (PEG) molecules, where the antibody fragment is a F(ab') 2
XX comprising: (a) first chain that is either a light chain or a heavy chain
XX ; (b) a first opposite chain that is either a heavy chain opposite the
XX first light chain or a light chain opposite the first heavy chain; (c) a
XX second chain that is either a light chain or a heavy chain; and (d) a
XX second opposite chain that is either a heavy chain opposite the second
XX light chain or a light chain opposite the second heavy chain; where every
XX PEG molecule is covalently attached to a first cysteine residue in the
XX first or second chain that would ordinarily form a disulphide bridge with
XX a second cysteine residue in the first or second opposite chain, where
XX the disulphide bridge is avoided by substitution of another amino acid
XX residue for the second cysteine residue in the first or second opposite
XX chain, where the F(ab') 2 comprises an antigen binding site that binds to
XX human interleukin-8 (IL-8), and where the apparent size of the conjugate
XX is at least about 500 kD. The antigen binding sites may be derived from
XX murine monoclonal antibodies 5.12.14 or 6G4.2.5. The method is useful for
XX treating lung injury, including adult respiratory distress syndrome
XX (ARDS) in a mammal and inflammatory diseases (such as asthma,
XX inflammatory bowel disease, psoriasis and sclerosis), ischaemic
XX reperfusion disorders, stroke, multiple sclerosis, meningitis,
XX osteoarthritis, septic shock, autoimmune disease (e.g. rheumatoid
XX arthritis), alcoholic hepatitis, cystic fibrosis and many other diseases
XX and disorders listed in the specification. The present sequence
XX represents a human antibody sequence included for comparison with the
XX mouse humanised monoclonal antibody sequences
XX
XX Sequence 109 AA;
XX
XX Query Match 97.6%; Score 546.5; DB 6; Length 109;
XX Best Local Similarity 98.2%; Pred. No. 4.6e-32;
XX Matches 107; Conservative 1; Mismatches 0; Indels 1; Gaps 1;
XX
XX QY 1 DIQWTPSSLSASVGRVITTCRASTISKYLAWYQKFGKAPKLLI-YSGSTLQSGVP 59
XX |||||
XX Db 1 DIQWTPSSLSASVGRVITTCRASTISKYLAWYQKFGKAPKLLIYSGSTLQSGVP 60
XX |||||
XX QY 60 SRPSSGSGTDFLTITSSLPEDPATYVCOQHNEYPLTFGGTKVEIKR 108
XX |||||
XX Db 61 SRPSSGSGTDFLTITSSLPEDPATYVCOQHNEYPLTFGGTKVEIKR 109
XX |||||
XX
XX RESULT 13
XX ABUS9499
XX ID ABUS9499 standard; protein; 109 AA.
XX AC
XX AC ABUS9499;
XX
XX XX
XX DT 22-APR-2003 (first entry)
XX
XX XX Human light chain kappaI consensus framework.
XX
XX

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KW Interleukin-8; IL-8; humanised antibody; antibody; 5.12.14; 6G4.2.5;
KW inflammatory disorder; psoriasis; atopic dermatitis; sclerosis;
KW systemic scleroderma; inflammatory bowel disease; Crohn's disease;
KW ulcerative colitis; ischaemia; reperfusion; myocardial infarction;
KW stroke; adult respiratory distress syndrome; rheumatoid arthritis;
KW alcoholic hepatitis; acute lung injury; asthma; cerebral oedema;
KW myocardial ischaemia; cranial trauma; asphyxia; Behcet's disease;
KW dermatomyositis; polymyositis; multiple sclerosis; meningitis;
KW encephalitis; uveitis; osteoarthritis; lupus nephritis; trauma;
KW autoimmune disease; Sjogren's syndrome; vasculitis; septic aemia;
KW central nervous system inflammatory disorder; sepsis; sarcoidosis;
KW multiple organ injury syndrome; bacterial pneumonia; glomerulonephritis;
XX inflammation of the lung; human.
XX
XX Homo sapiens.
XX
XX OS US6458355-B1.
XX
XX PN 01-OCT-2002.
XX
XX PD
XX
XX XX 24-JUL-1998; 98US-00121952.
XX
XX PF 22-JAN-1998; 98US-0074330P.
XX
XX PR 20-FEB-1998; 98US-0075467P.
XX
XX PR 20-FEB-1998; 98US-0075467P.
XX
XX XX (GETH ) GENENTECH INC.
XX
XX PA Hsei V, Koumenis I, Leong S, Presta L, Shahrokh Z, Zapata G;
XX
XX PI WPI; 2003-208759/20.
XX
XX DR
XX
XX XX Treating inflammatory disorder in a mammal, involves administering a
XX conjugate of polyethylene glycol and a single antibody fragment
XX comprising antigen binding site that binds to human interleukin-8, to
XX mammal.
XX
XX XX Example 3G; Fig 29; 259pp; English.
XX
XX The invention relates to treating an inflammatory disorder in a mammal,
XX comprising administering to the mammal, an effective amount of a
XX conjugate of a single antibody fragment (e.g. the heavy or light chains
XX of the humanised mouse monoclonal antibodies 5.12.14 and 6G4.2.5, which
XX also have their intramolecular disulphide bridges ablated by substitution
XX mutations) covalently attached to one or two polyethylene glycol (PEG)
XX molecules. The antibodies comprise an antigen binding site that binds to
XX human interleukin-8 (IL-8), and the apparent size of the conjugate is at
XX least 500 kDa. The method is useful for treating an inflammatory disorder
XX e.g. ischaemic reperfusion disorder such as surgical tissue reperfusion
XX injury, myocardial ischaemia or myocardial infarction, or hypovolemic
XX shock, in a mammal e.g. human. The method is useful for treating
XX inflammatory disorders including psoriasis, atopic dermatitis, systemic
XX scleroderma and sclerosis, responses associated with inflammatory bowel
XX disease, ischaemic reperfusion disorders, myocardial ischaemic
XX conditions, cerebral oedema secondary to stroke, cranial trauma,
XX asphyxia, adult respiratory distress syndrome, acute lung injury,
XX Behcet's disease, dermatomyositis, polymyositis, multiple sclerosis,
XX dermatitis, meningitis, encephalitis, uveitis, osteoarthritis, lupus
XX nephritis, autoimmune diseases such as rheumatoid arthritis, Sjogren's
XX syndrome, vasculitis, central nervous system inflammatory disorder,
XX multiple organ injury syndrome secondary to septic aemia or trauma,
XX alcoholic hepatitis, bacterial pneumonia, antigen-antibody complex
XX mediated diseases including glomerulonephritis, sepsis, sarcoidosis,
XX immunopathologic responses to tissue/organ transplantation, inflammations
XX of the lung, inflammatory bowel disease such as ulcerative colitis and
XX asthma. The present sequence represents the light or heavy chain of human
XX IgG, used to design the humanising mutations in the two mouse antibodies
XX
XX Sequence 109 AA;
XX
XX Query Match 97.6%; Score 546.5; DB 6; Length 109;
XX Best Local Similarity 98.2%; Pred. No. 4.6e-32;
XX Matches 107; Conservative 1; Mismatches 0; Indels 1; Gaps 1;

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Qy 1 DIQWTSFSSLSASVGRVITTCRAKTIISKYLAWOQKPGKAPKLLI-YSGSTLQSGVP 59
 Db 1 DIQWTSFSSLSASVGRVITTCRAKTIISKYLAWOQKPGKAPKLLIYSGSTLQSGVP 60
 Qy 60 SRFSGSGSGTDFTLTISSLOPEDPATYCCOHNHNEPLTFGGTKVEIKR 108
 Db 61 SRFSGSGSGTDFTLTISSLOPEDPATYCCOHNHNEPLTFGGTKVEIKR 109

RESULT 14
 AAE39082
 ID AAE39082 standard; protein; 109 AA.
 AC AAE39082;
 XX
 XX
 DT 18-DEC-2003 (first entry)
 DE Human light chain kappaI consensus framework protein.
 KW Interleukin-8 mediated disease; adult respiratory distress syndrome; IL;
 KW bacterial pneumonia; inflammatory bowel disease; hypovolemic shock; ARDS;
 KW ulcerative colitis; ischaemic reperfusion injury; myocardial infarction;
 KW acute lung injury; inflammatory disease; asthma; antibody; human.
 XX
 OS Homo sapiens.
 XX
 XX US2003021790-A1.
 XX
 PD 30-JAN-2003.
 XX
 XX 29-NOV-2000; 2000US-00726258.
 XX
 XX 22-JAN-1998; 98US-0074330P.
 PR 20-FEB-1998; 98US-0075457P.
 PR 24-JUL-1998; 98US-0094003P.
 PR 24-JUL-1998; 98US-0094013P.
 PR 20-JAN-1999; 99US-00234182.
 XX
 PA (GRTH) GENENTECH INC.
 XX
 XX Haei V, Koumenis I, Leong S, Presta L, Shahrokh Z, Zapata G;
 PI WPI; 2003-605694/57.
 XX
 XX Novel conjugates comprising antibody fragments covalently attached to
 PT nonproteinaceous polymer molecules, useful for treating inflammatory
 PT diseases, acute lung injury, ischemic reperfusion injury, pneumonia and
 PT asthma.
 XX
 PS Example; Fig 29; 266pp; English.
 XX
 CC The invention relates to novel conjugates comprising antibody fragments
 CC covalently attached to nonproteinaceous polymer molecules. The invention
 CC is useful for treating interleukin (IL)-8 mediated diseases or disorders
 CC such as inflammatory diseases, acute lung injury e.g. adult respiratory
 CC distress syndrome (ARDS), ischaemic reperfusion injury e.g. myocardial
 CC infarction, hypovolemic shock, inflammatory bowel disease e.g. ulcerative
 CC colitis, bacterial pneumonia and asthma. The invention is also useful as
 CC a reagent in an animal model system for in vivo study of the biological
 CC functions of the antigen recognised by the conjugate. The present
 CC sequence is human light chain kappaI consensus framework protein. This
 CC sequence is used in the exemplification of the invention
 XX
 SQ Sequence 109 AA;
 Query Match 97.6%; Score 546.5; DB 7; Length 109;
 Best Local Similarity 98.2%; Pred. No. 4.6e-32;
 Matches 107; Conservative 1; Mismatches 0; Indels 1; Gaps 1;

Qy 1 DIQWTSFSSLSASVGRVITTCRAKTIISKYLAWOQKPGKAPKLLI-YSGSTLQSGVP 59
 Db 1 DIQWTSFSSLSASVGRVITTCRAKTIISKYLAWOQKPGKAPKLLIYSGSTLQSGVP 60

Qy 60 SRFSGSGSGTDFTLTISSLOPEDPATYCCOHNHNEPLTFGGTKVEIKR 108
 Db 61 SRFSGSGSGTDFTLTISSLOPEDPATYCCOHNHNEPLTFGGTKVEIKR 109

RESULT 15
 AAB46020
 ID AAB46020 standard; peptide; 240 AA.
 AC AAB46020;
 XX
 XX
 DT 23-MAR-2001 (first entry)
 DE Human MUC-1 scFv clone N1.
 XX
 XX MUC1; human; vaccine; conformation-dependent antigen; antibody; cancer;
 KW antidiotypic antibody; cytostatic; virucidal; antibacterial; TP antigen;
 KW antiparasitic; infectious disease.
 XX
 OS Homo sapiens.
 XX
 XX W02000073430-A2.
 XX
 PD 07-DEC-2000.
 XX
 XX 29-MAY-2000; 2000WO-DE001809.
 XX
 PR 27-MAY-1999; 99DE-01024405.
 PR 09-SEP-1999; 99DE-01043016.
 XX
 XX (DELB-) DELBRUECK CENT MOLEKULARE MEDIZIN MAX.
 XX
 XX Goletz S, Karsten U;
 DR WPI; 2001-049937/06.
 XX
 XX
 PT Vaccines against conformation-dependent or non-peptide antigens, based on
 PT DNA encoding peptide which mimics the antigen, useful e.g. as antitumor
 PT vaccines.
 XX
 PS Disclosure; Page 5-9; 36pp; German.
 XX
 CC This invention describes a novel vaccine (V1) against conformation-
 CC dependent antigens (CDA) comprising DNA (I) and/or an antibody, or
 CC peptide which immunologically imitates CDA, is new, (I) encodes a region
 CC of an antidiotypic antibody (Ab2) or another peptide which: (a)
 CC specifically binds to the binding site of an antibody (Ab1) or an antigen
 CC binding molecule; and (b) immunologically mimics the initial antigen. The
 CC epitope is partially or completely conformation-dependent, and has an
 CC immunogenic structure defined by a specific spatial conformation of amino
 CC acids. (I) is used in the form of linear or circular naked DNA and/or
 CC with a viral vector and/or adjuvants. The products of the invention have
 CC cytostatic, virucidal, antibacterial and antiparasitic. The invention
 CC also describes (1) a corresponding vaccine (V2) against antigens which
 CC are not proteins or peptides, as defined above but which have epitopes
 CC which show an immunogenic structure; (2) preparing (V1) and (V2); (3)
 CC human antidiotypic antibody fragments against the MUC1-conformation
 CC epitope having one of 31 approximately 60 residue amino acids sequences,
 CC all fully defined in the specification; (4) MUC1-conformation epitope
 CC mimics having one of 16 9-17 residue amino acid sequences, all fully in
 CC the specification; (5) antidiotypic antibody fragments against the TP
 CC antigen having one of 24 approximately 200 residue amino acid sequences,
 CC fully defined in the specification; (6) TP carbohydrate epitope mimetics
 CC having one of 25 7-13 residue amino acid sequences, all fully defined in
 CC the specification; and (7) DNA sequences encoding the fragments and
 CC derivatives defined in (3, 4, 5, or 6). (V1) and (V2) are used to treat
 CC cancer, and infectious diseases, e.g. caused by prions, viruses, bacteria
 CC and parasites. The vaccines are effective in cases where vaccination has
 CC previously not been possible
 XX
 SQ Sequence 240 AA;
 Query Match 91.4%; Score 512; DB 4; Length 240;

	Best Local Similarity	91.7%; Pred. No. 2.8e-29;	Mismatches	99; Conservative	2; Mismatches	7; Indels	0; Gaps	0;
QY	1	DIQMTQSPSSLSASVGDRTVTITCRASKTISKYLAWYQQKPKAPKLLIYSGSTLQSVP	60					
DB	133	DIQMTQSPSSLASVGDRTVTITCRASQSISSVLNWKQKGPAPKLLIYGASVLSQVPS	192					
QY	61	RFGSGSGSTDTPLTILISSLPQEDPATYYCQHNEYPFLTFGQGTKVEIKR	108					
DE	193	RFGSGSGSTDTPLTILISSLPQEDPATYYCQHNLNYPLTFGQGTKVEIKR	240					

| Search completed: April 13, 2006, 17:13:39
| Job time : 222.273 secs

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